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PARENT-ADOLESCENT SEXUAL ATTITUDE CONGRUENCE IN RELATION TO ADOLESCENT SEXUAL INTERCOURSE EXPERIENCE

by

John Kelly McCoy

Burke Adams for his help and for the many interesting conversations we had together, and Brian Fletcher for his useful suggestions in regard to the analysis.

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family and Human Development

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John Kelly McCoy

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ABSTRACT

Parent-Adolescent Sexual Attitude Congruence in Relation
to Adolescent Sexual Intercourse Experience

by

John Kelly McCoy, Master of Science
Utah State University, 1987

Major Professor: Dr. Brent C. Miller
Department: Family and Human Development

Survey data from 472 adolescents (ages 14-19) and their parents were analyzed to examine the relationship that existed between the premarital sexual attitudes of parents and the sexual behavior of their adolescents. The attitudes of the adolescents and their parents were measured using Likert type questions about sexual intercourse prior to marriage. The sexual behavior of adolescents was based on the responses of the adolescents regarding their frequency of necking, petting, and sexual intercourse. The relationship between adolescents' sexual behavior and parents' attitudes was examined using several different conceptual models. The amount of attitude agreement that mothers and fathers had with one another - as well as with their adolescent - was significant to understanding the contribution parents had on adolescents' sexual behavior. The direction of parent-adolescent attitude agreement and husband-wife attitude agreement was also found important in understanding how congruence functioned.

(138 pages)

CHAPTER I

INTRODUCTION

Currently there is concern over the increasing number of adolescents entering into sexual intercourse activity, with the increase occurring particularly among female adolescents (Jessor & Jessor, 1975; Zelnik & Kantner, 1980). Whether or not to reserve sexual intercourse for marriage is an individual decision, but when premarital intercourse results in an unwanted pregnancy that decision can have far reaching implications.

Many have felt that the family plays an important role in determining the sexual behavior of adolescents. There has, however, been a great deal of confusion about what role the family actually has. By comparing the attitudes of adolescents and their parents, this study will attempt to shed greater light on the impact parents have with respect to their adolescent's premarital sexual behavior.

1.1 Justification/Rationale

1.1a Consequences of adolescent pregnancy. While pregnancy and childbirth during adolescence can result in negative consequences for many individuals it is the teenage mother and her child who will be most severely affected. As for the implications of early childbirth on the infant Menken (1980), in her review of data gathered by the National Center for Health Statistics, has found several areas in which the "at risk" probability for an infant is significantly increased as a result of the child's mother being a teenager. However, rather than the difference in adolescent and older mothers being a

result of the younger mothers being biologically immature, newer findings are pointing almost exclusively toward the differences being a result of teenage mothers having improper diets and obtaining less adequate prenatal care (Makinson, 1985; Baldwin & Cain, 1980). Whether the infants of adolescent mothers are at greater risk as a result of their mother's biological development or because of an immature mother's inability to give adequate preparation for their arrival, the fact remains that when babies are born to teenage mothers they are at a disadvantage which could remain with them the rest of their lives.

For many young women, giving birth to a child while still in high school will have a major impact on the direction their life takes. For those girls who decide to marry about half will break up within the first four years (Furstenberg, 1980). However, as single parenthood has become increasingly accepted by society more adolescent mothers are choosing not to marry, and either attempt to raise the child alone or do so with the help of the child's grandparents (Zelnik & Kantner, 1980; Furstenberg, 1980).

In his analysis of ever married mothers from the 1967 Survey of Economic Opportunity, Bacon (1974) found that, while only about one in ten women who gave birth after age 21 were impoverished, roughly 25% of those who gave birth before they were eighteen years old were living in poverty. This may in part be a result of the likelihood these adolescent girls have of completing high school. In his study of 400 pregnant girls in Baltimore, Furstenberg (1980) found that their rate of high school graduation was only about half that of girls who did not become pregnant until after graduation. Similarly, Bacon (1974) found

that of his population of ever married mothers, women who became mothers at age twenty or older were about five times as likely to have finished high school as did those who became mothers before the age of sixteen.

The result of these differences are that girls who become mothers while still of high school age are going to have a much greater struggle in their attempt to achieve an adequate lifestyle than they would had they been able to postpone having a child until later. For many of the children that are born to an adolescent mother there is also a good chance that they will repeat the process of becoming pregnant as adolescents themselves (Inazu & Fox, 1980; Baldwin & Cain, 1980).

1.1b Increasing rates and trends in adolescent pregnancy. One reason for the increased concern over adolescent pregnancy and childbirth is the fact that a greater proportion of adolescents are becoming sexually active at an ever younger age. According to their national study of 15-19-year-old women living in metropolitan areas, Zeinik and Kantner (1980) found that the level of premarital pregnancy among teenagers almost doubled between their first study in 1971 and their last study in 1979. The major reason for this increase in pregnancy is the parallel increase in the proportion of adolescents who reported having had premarital sexual intercourse. In their study, Zeinik and Kantner witnessed a significant increase in the number of 15-19-year-old women who reported having had sexual intercourse, with an increase from 30 percent in 1971 to 49 percent in 1979.

Most of the increase in adolescent sexual intercourse is due to a change in the sexual behavior of females. Lewis (1973), for example, found that in 1969, college males were significantly more apt than college females to have had premarital coitus experience (63% of males compared to 34% of the females); however, later research has indicated that, while males intercourse experience has remained fairly stable, females have begun to close the gap (Jessor & Jessor, 1975). From their data the Jessors concluded, "Whatever the reason, the data suggest that the traditional male-female asymmetry in rates of premarital sexual activity may be in the process of disappearing" (p. 482).

1.1c Risk factors in adolescent pregnancy. One issue of concern is how to induce in adolescents a more responsible attitude towards sexual intercourse. When deciding how to avoid an unwanted pregnancy there are two primary means for this to be achieved: 1) abstinence from sexual intercourse activity or 2) an effective method of contraception. While both of these techniques can have favorable results, it is generally easier to obtain parental and school involvement where postponement of sexual intercourse is the issue rather than contraceptive usage. As a result, the present study focuses on sexual abstinence.

Although many school and community programs have been established to educate adolescents on sexual issues, it would appear that the influence of such programs on adolescents' sexual intercourse behavior is rather limited (Shah & Zelnik, 1981; Spanier, 1976). However

parents, for the most part, have also been found to be ineffective as direct sex educators (Fox, 1981).

But because parents have generally been poor sources of sex education for their children, this does not mean that they are incapable of having any impact on the sexual behavior of their adolescent. The family has long been viewed as an environment within which a great deal of "potential" influence exists. Often more effective than the parents attempts at directly influencing their child's behavior is the parents indirect influence through their conduct in parenting (Inazu & Fox, 1980) as well as their behavior in roles other than that of a parent (i.e. adult relationships both in and out of the marital structure).

Although much research has been done on the degree to which parents influence their children's attitudes - through the transmission of their own values (Acock & Bengtson, 1978, 1980; Furstenberg, 1971; Jennings & Niemi, 1974) - still little is known about parental influences on the sexual intercourse behavior of the adolescent. What type of familial environment and relationships are most likely to produce value transmission between the parents and their adolescent child? To what extent do parental attitudes and parent-child relationships influence adolescent sexual behavior?

Much of the research that has examined the family and its impact on adolescent sexual behavior has made the assumption that as adolescents internalize those values which their parents believe in, the adolescent will necessarily be a more mature individual, one who will recognize the responsibility associated with sexual intercourse

behavior. But can it be assumed that being a parent is always equated with being mature? Do parents always believe that adolescents should be sexually abstinent? Perhaps in reality many of those adolescents whose behavior resulted in an unwanted pregnancy were actually adhering to the values that their parents believe in.

1.2 Conceptual Framework

Several theoretical perspectives can be utilized to explain contemporary adolescent sexual behavior. The biosocial, deviance, and symbolic interaction perspectives will be summarized briefly below before focusing more specifically on parent-child socialization as the theoretical underpinning of this study.

1.2a Biosocial. Biosocial explanations of adolescent sexual behavior include elements of both individual maturation (ontogeny) and species or population change (phylogeny). Within a given population, individuals whose sexual maturation is precocious tend to experience sexual relationships sooner than their age mates (Billy & Udry, in press; Udry, Billy, Morris, Groff & Raj, 1985). This is particularly intriguing because other evidence suggests that dating, which is the social context in which intercourse usually begins, occurs no sooner among those who develop early than among those who develop later (Dornbusch, et al., 1981). While early sexual development does not effect the age when dating begins, it does affect the extent of heterosexual behavior that usually occurs within dating relationships. On the group level, it has been well documented (Bullough, 1981; Frisch, 1983; Petersen & Taylor, 1980; Tanner, 1981) that the sexual

changes which mark the onset of puberty (e.g., menarche) are occurring sooner, or at younger average ages, in contemporary populations than they did in previous generations. In sum, precocious sexual development of individuals and earlier sexual maturation of the population are both significant biosocial factors in explaining contemporary adolescent sexual behavior.

1.2b Deviance. Social deviance theories also have been used to explain why early sexual behavior is more likely to occur among some adolescents than among others (Reiss, 1970). The most common deviance perspective identifies adolescent sexual behavior as an age-graded delinquency or a status offense behavior that is considered to be acceptable, or even expected, among adults but not among adolescents (Jessor & Jessor, 1975). Smoking, drinking alcohol, and sexual activity are similar behaviors from this point of view. Adolescents are restricted from engaging in these behaviors because of their age; they are considered to be too immature to engage in these acts responsibly or too immature to accept the consequences of their behavior (Petersen & Boxer, 1982). Those who deviate by engaging in these behaviors before it is normatively acceptable tend to engage in other age-graded delinquencies. While such behaviors are not predictive of adult criminal behavior, they can be viewed as the expression of premature independence from the usual social controls exerted by parents, school authorities and religious officials.

1.2c Symbolic Interaction. It would be difficult to examine the transmission of attitudes and values without taking into consideration the arguments raised by the Symbolic Interaction perspective. Herbert

Blumer (1973) identified Symbolic Interaction as a unique social-psychological perspective and presented these three basic postulates of its ideology:

1. Human beings act toward things on the basis of the meanings that the things have for them.
2. The meaning of things arises out of the social interaction one has with one's fellows.
3. The meanings of things are handled in and modified through an interpretative process used by the person in dealing with the things he encounters.

While we as humans are confronted with an enormous amount of stimuli, we will only perceive the existence of a small proportion of it. As we begin to recognize something and attempt to fit it into the existing order by which we understand our world, the object - and those aspects of our lives affected by it - begin to take on a new meaning for us. There are various ways by which we attach meaning to something. As Blumer (1973) points out, "The meaning of a thing for a person grows out of the ways in which other persons act toward the person with regard to the thing. Their actions operate to define the thing for the person" (pg. 51).

Within the context of adolescent sexual intercourse behavior there are several applications of this idea. First, it is important to recognize that for adolescents the issue of premarital sexual behavior will have different meanings. There are many adolescents for whom concern about sexual intercourse never really becomes an issue. Any meaning such behavior might have for these teenagers is distant and

unrelated to their own lives. For those adolescents who are confronted with decisions about sexual intercourse many different meanings can become associated with it. For some adolescents premarital sex is seen as a sinful activity which is to be avoided; for others it is a means to acquire both physical and emotional rewards; to some it is a status symbol; and to others it is an expression of sincere affection.

As Blumer has pointed out, much of the meaning that a person attaches to something is the result of how individuals that are of importance to the person act towards the thing. It is this point that is significant in the transmission of parental values. The impact that parents will have on their child's sexual intercourse behavior will largely be based on two factors: first, the way that the parents portray their attitudes about sexual intercourse behavior; and second, how the child interprets those parental actions.

The notion that what a parent communicates - either directly or indirectly - is not necessarily what the child is perceiving has long been an issue for researchers in their attempts at understanding the process of value transmission in the parent-adolescent relationship. While some have argued that it is the child's perception which determines their own behavior (McBroom, Reed, Burns, Hargraves & Trankel, 1985; Schludermann & Schludermann, 1983), others have pointed out that examining only the adolescent's perception does not accurately explain the interaction taking place (Newcomer & Udry, 1985; Furstenberg, 1971).

Although there is no formally developed conceptual framework which deals with parent-child socialization and the degree that it influences

children's decision making processes, many studies (Smith, 1983; Hoffman, 1970; Elder, 1963; Acock & Bengtson, 1980; Furstenberg, 1971; Jennings & Niemi, 1974) have documented the unique contribution the family can have. While this influence is strongly dictated by the perceptions parents and adolescents have of each other it is also equally important to understand the actual attitudes and behavior upon which these perceptions are based. One possible method for understanding the influence parents have on their teenagers' behavior is the examination of the congruency that exists between the attitudes of adolescents and their parents.

1.3 Purpose

It is the purpose of this study to analyze the actual attitudes of both parents and their adolescent children to better understand what influence parents have on their children by addressing the following questions in relation to parent-adolescent attitude congruence and premarital sexual intercourse:

- 1) Do parents' attitudes about premarital coitus effect the sexual intercourse behavior of the adolescent?
- 2) Does congruence between the attitudes of adolescents and their parents have much reflection on the adolescents own sexual behavior?
- 3) If the congruency of attitudes between adolescents and their parents is important to the understanding of what influence parents' attitudes have on adolescents' premarital sexual

behavior, what is the best method for detecting that congruency and its relationship to the adolescents' behavior.

4) Does the degree to which husbands and wives are in agreement about premarital sex effect their level of influence on their adolescents' own sexual attitudes and behavior?

5) Based on previous assumptions, are adolescents who have a high level of congruence with their parents about premarital sexual intercourse less likely to be sexually active themselves?

CHAPTER II

REVIEW OF LITERATURE

2.1 Values, Attitudes and Behavior

As the probability increases that a girl will become pregnant during adolescence, whether or not she will become pregnant is ever more dependent on a conscious decision by both the girl and her companion that a pregnancy will not take place. Although very few adolescents actually want to become pregnant, the fear of an unwanted pregnancy occurring is a minimal deterrent for most girls. It is her personal values which appear to be far more important in restricting an adolescent female from engaging in premarital coitus (Burgess & Wallin, 1953).

In much of what we do, it is our values or value system which will determine what decisions we will make. According to Rokeach (1973) a value is, "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (p. 5). In his discussion about values, Rokeach points out that there are two basic types of values: instrumental and terminal. While terminal values include ideas about an individual's personal salvation or peace of mind, instrumental values are more centered around what is appropriate behavior, either from a moral standpoint or from one of social and individual competence.

In attempting to deal with an adolescent in reference to their sexual intercourse behavior, one problem that arises is that it can

involve many levels of the adolescent's system of values. While for many adolescents premarital sexual intercourse is to be avoided because of guilt, for others it is more a question of competence - whether it is a socially and individually desirable activity. Another aspect important to an adolescent's decision - regardless of their perspective - is what Rokeach has termed as the "oughtness" of a value, or the degree to which individuals are expected to comply with a value by society. An example of this idea can be seen in the disappearance in gender differences with respect to sexual intercourse behavior. Although there have always been relatively permissive expectations about boys' sexual behavior, it has only been recently that society has begun to hold similar attitudes towards girls, a possible explanation for the disappearance of male-female sexual intercourse differences.

While values are not completely stable - were it so individual and social change would be impossible - they are very enduring. As Rokeach explains:

It may be suggested that the enduring quality of values arises mainly from the fact that they are initially taught and learned in isolation from other values in an absolute, all-or-none manner....It is the isolated and thus the absolute learning of values that more or less guarantees their endurance and stability (1973, p. 6).

However, values are not - as has been mentioned - a constant which is unchanging. Rokeach goes on to point out that:

As a child matures and becomes more complex, he is increasingly likely to encounter social situations in which several values rather than one value may come into competition with one another, requiring a weighing of one value against another - a decision as to which value is the more important....Gradually, through experience and a process of maturation, we all learn to integrate the isolated, absolute values we have been taught in this or that context into a hierarchically organized system, wherein each value

is ordered in priority or importance relative to other values (p. 6).

The initial development of values tends to take place in the relatively isolated, simplistic environment of the nuclear family system. As these values come into competition with others, which we are exposed to in various contexts (e.g., school, peer group), we begin to order them along a continuum of relative importance. How adolescents organize their value system will be based largely on who they view as legitimate sources of information, and what values those sources emphasize.

It is the simplistic environment within which values develop and the enduring nature of values once established that allows parents to have a potentially significant influence on their child's sexual intercourse behavior. Because they are usually the initial role model which children will look to, parents can make a difference if they take advantage of this opportunity early on.

2.2 Family Influences

While values are established in relative isolation a child will begin to evaluate the acceptability of these values as the peer group becomes increasingly important in their lives, thus enlarging the adolescent's number of legitimate sources. Although much has been written about the supposed conflict in attitudes and values between parents and peers, recent research has begun to question the amount of difference that actually exists (Coleman, 1978; Bengtson, 1970; Hartup, 1970). It would appear that teenagers tend to choose peers whose values are congruent with their parents values (Offer & Offer, 1976).

Teenagers will also generally select those values held by their peer group, which are divergent from their parents own values, only when parent's involvement with their children is low (Furstenberg, 1971) or when parents are not clear in their presentation of what their own values are or the motivation behind those values (Conger, 1977; Dickinson, 1974). Thorton and Camburn (1983) found that - contrary to popular belief - parents' influence on their adolescent children, with respect to the adolescents' sexual intercourse behavior, did not decrease as the adolescent became older. Instead they came to the conclusion that familial influences on the sexual behavior of the child is fairly consistent across the teenage years; that if parents were influential when the child was younger they will most likely maintain that influence throughout the child's adolescence. Although several studies have shown a trend of adolescents increasingly turning to their peers for guidance with respect to sexual behavior, there is some question as to whether parents are actually losing influence over their children or simply giving it away.

2.2a Parents as role models. If parents have the potential to influence their children's decisions then what are the means available to them in their attempts to pass on those values that they hold to be important. One indirect parental factor which has been found to have considerable consequence on children's sexual attitudes is the role model parents project to their children of what is considered appropriate behavior around the opposite sex.

Thorton and Camburn (1983) found that divorce and remarriage influenced the attitudes, behavior, and perception of both mothers and

their children. They found less traditional attitudes toward premarital sex by divorced mothers as compared to mothers who remained married. Thorton and Camburn determined that re-entry into dating situations by the divorced mothers altered both their own attitudes as well as how their attitudes were perceived by their children.

Hetherington (1972) similarly found that while the impact of father absence was most evident on sons in their earlier years, daughters were most adversely affected during adolescence. She found that while daughters of divorcees were overly active in their association with boys, daughters of widows would - in contrast - avoid interaction with boys. Hetherington concluded that while fathers actual involvement in child-rearing is still not clear they are important in at least one respect; fathers are a significant role model in helping their adolescent daughters learn appropriate behavior around other males.

2.2b Discipline and control. Another factor important to the process of value transmission in the family is found in the unique status which parents acquire simply by becoming parents. When a child is born, the parents of that child are automatically given authority unlike that found in any other legal relationship. As a result of that authority parents have the power to control and discipline their children in almost whatever way they see fit. Although most parents are capable of eliciting compliance from their children while they are in their presence, many discipline techniques are useful only for short term compliance. It is then, the extent to which the adolescent abides by his or her parents' values when not in their presence that indicates

the parents' degree of influence. This voluntary compliance then determines whether a child actually internalizes those values taught by their parents or if they are merely "playing along" while under the parents' immediate control (Lepper, 1975).

In his research on parental discipline, Hoffman (1970) found three distinct types of discipline techniques: power assertion, love withdrawal, and induction. Hoffman saw power assertion as a parent's capitalization on their superior strength or their ability to control material resources. While he saw love withdrawal as another form of coercive power by the parent, Hoffman believed that punishment resulted in the parent depriving the child of any emotional support. Examples of love withdrawal are seen in the parent's refusal to talk or listen to the child, ignoring the child, or even verbally expressing dislike of the child.

In contrast to these coercive methods of control, induction is based on the parents belief that the child is capable of making rational decisions on their own when they are given a proper explanation of the possible outcomes. Hoffman found that while the overt use of power-assertive techniques - such as physical punishment and withdrawal of rewards or privileges - correlated negatively with later moral behavior in situations outside the home, the use of induction and reasoning showed positive correlations with subsequent internalization and behavior.

In an earlier study, Elder (1963) also found three distinct types of parental power: autocratic - in which the parent does not allow the adolescent to express his or her views with regard to issues which

concern them; democratic - where the adolescent is encouraged to participate in issues that involve themselves but the final decision is always made or approved by the parent; and permissive - in which the adolescent has more influence in making decisions that concern themselves than their parents do. Although Elder's typology is similar to Hoffman's, there is a major difference. While Hoffman's three techniques deal primarily with disciplinary styles, Elder's categories are related more to the adolescents degree of involvement concerning his or her own behavior.

Elder found that although induction is important it is most effective when the parent also makes their own expectations clear to the adolescent, as in the democratic structure. In his study, Elder (1963) determined that, "adolescents are more likely to model their parents and to associate with parent-approved peers if their parents explain their rules frequently when asked to do so" (p. 65). From these two studies it is evident that parents need to allow their children the opportunity to weigh out decisions for themselves, but at the same time provide a structured environment within which they are able to stress their own values as well as keep their children from deviating too far.

2.2c Parents as sources of information. A major factor in determining the influence parents will have is their ability to act as information resources for their children. While there are many daily issues that parents must discuss with their children, those topics that are often of greatest concern (i.e. sex, drugs, religion or politics) are seldom, if ever, discussed. In his review of literature related to

parent-adolescent conflict, Montemayor (1983) concluded that, "apparently most families cope with potentially explosive generational differences by silently ignoring them" (p. 92).

In his study of adolescent sources of sex information, Dickinson (1974) found that while young people preferred their parents as their source of sex information, it was friends and impersonal sources which were most commonly listed as their actual main "educators." When Newcomer and Udry (1985) found little effect from parent-child communication with respect to adolescent coitus, they proposed the reason to be that parental communication about sex is "generally so vague or so limited as to have no impact" (p. 174). In her review of fifteen studies on the initial or most important source of sexual information, Fox (1981) found - contrary to expectation - that mothers who were not very knowledgeable about sex and contraceptives tended to be those who spoke most frequently to their daughters about sexual intercourse and morality. She speculated that this may explain the current lack of significance between parent-child communication and coital behavior because she believed that talks about such topics may involve "negative, one-way messages" from the mother to the daughter, rather than "positive, two-way discussions." Similar to Fox's conclusions, Newcomer and Udry (1985) question the assumption most researchers have that parent-child communication about sex is desirable. They stress that, "openness about sexuality is not the same as direct, specific discussions between a parent and child about the child's behavior" (p. 170).

While Fox (1981) emphasized that only weak support has been found for the relationship between parent-child communication and adolescent sexual behavior, she was quick to point out that causality for this relationship was, "not at all clear or well-established." Fox stressed that many adolescents may not talk with their parents until after they have already become sexually active.

A second factor that can greatly determine parents ability to act as information sources is the extent that children perceive their parents as legitimate sources of information. Legitimacy of parents as references is based largely on adolescents' respect and admiration towards their parents and their parents' beliefs. While the referent power of parents' goes largely unchallenged in the child's earlier years, the increase of influences (i.e. the media, the school system, peers, etc.) outside the home can quickly erode this power for parents who have given little reasoning for their behavior. In his study on mobility orientation of adolescents, Furstenberg (1971) found that children "who frequently sought their parents' help are much more likely to share their goals" (p. 600). Furstenberg found that consensus within the parent-child relationship was greatest when it became more voluntary for the child. In contrast he found that, "When the children can easily turn to others as reference individuals, reliance on their parents is especially indicative of receptivity to parental influence" (p. 600).

2.2d Parents as emotional supports. One aspect important to the parents' ability to influence their children is the extent to which they attempt to cultivate a personal relationship with their children.

Inazu and Fox (1980) concluded that of the factors they examined the strongest predictor of sexual experience was the daughter's report of her own relationship with her mother. They found that the more favorable the relationship, the less likely the daughter was to have engaged in sexual intercourse. In relation to this idea of support, Lewis (1973) found that unhappiness in the parental home was positively associated with female adolescents likelihood of having a greater incidence of premarital coitus, promiscuity and an early initiation into coitus. If parents want to help their teenagers in making decisions the parents must first make themselves available to their children. They have to be there when their children are in need of emotional support, and they must communicate to their adolescents the fact that they have a desire to help.

2.2e Transmission of values and parent-teen attitude congruence.

From the previous sections it would appear that, while there are many sources of influence outside the home, the degree to which parental values are transmitted to adolescents is largely dependent on the functioning of factors that exist in the family. Furstenberg (1971) concluded that when children "correctly perceived their parents' goals, they are quite likely to share their mobility orientation" (p. 598). More generally, when parents are able to make their own values clear - their children are more likely to adopt these same values as their own.

For teenagers to correctly perceive their parents' premarital sexual values, parents must project a consistent message - both directly and indirectly - of what their values are. In their examination of the adolescent development of political values, Jennings

and Nieml (1974) identified an important aspect of this projection of a consistent message. They determined that the similarity of an adolescent with his or her parent was consistently higher for both parents, when both parents "saw eye to eye or behaved in a congruent fashion" (p. 154). Many teenagers become confused about their parents attitudes and values simply because the parents themselves are either not in agreement about certain issues or because spouses are unaware of what messages one another is conveying to their children.

When a clear understanding is achieved between parents and their children many researchers believe that a high degree of agreement should exist between the attitudes of parents and adolescents. As a result, a concept that has become popular in the research on parent-adolescent value transmission is the congruency of attitudes that exists between parents and their children. Congruency is defined here as the amount of similarity or agreement that is present between the attitudes of two groups or individuals. Although the measurement of congruence can be useful in indicating the amount of agreement that is present between two individuals (i.e. a parent and their teenager), it may not give a true representation of the impact that parents have on their adolescents' value formation. For one, it is difficult to determine whether the direction of value transmission is passing from the parents to their children or if instead it is the adolescents that are influencing their parents attitudes (Smith, 1983). The use of congruence is also generally unable to detect whether there are factors outside the family which might be influencing both generations (Smith, 1983); a matter which many studies have stated must be considered

(Kohn, 1963; Hoge, Petrillo & Smith, 1982). However, even with these short comings taken into consideration the concept of attitude congruence can still be a useful measurement in examining the relationship between parent-adolescent attitude agreement and the behavior of the adolescents. It can be a yardstick of what common values are being shared - intentionally and unintentionally - between these family members.

With regard to the use of attitude congruence scores in the examination of adolescent sexual behavior, one assumption that could be the cause of inaccurate conclusions in previous research is the notion that agreement between parents and adolescents will result in more conservative behavior by adolescents. This, however, may not be a valid premise to work from. What would be the outcome if adolescents are in agreement with their parents, but their parents believe that sexual intercourse outside of marriage is appropriate? Is simply determining whether parents and adolescents are in agreement a sufficient indicator of the amount of congruence that exists, or could this instead actually mask what is taking place.

It is not enough to examine the simple agreement of adolescents and their parents (whether or not they have the same attitude), instead the direction of agreement needs to also be considered to be able to accurately interpret the influence parent-adolescent congruence will have on teenagers' sexual intercourse behavior. McBroom, Reed, Burns, Hargraves and Trankel (1985) stated that unless the qualitative nature or direction of the agreement is considered there is little sense in trying to predict behavior.

In their study of intergenerational value transmission and its relationship to adolescent behavior, McBroom et al. had undergraduate students identify their own attitudes and what they believed to be the attitudes of their parents about five behaviors (social and regular use of alcohol, social and regular use of marijuana, and premarital sex) commonly found occurring among young people. They then examined the agreement between the students' own responses and those which the students gave for their parents, comparing when simple agreement is used alone versus the level of agreement when direction is also considered. Of the five behaviors examined, premarital sex was found to have the greatest contrast with regard to the two methods used for determining attitude congruence. In their comparison of these two methods of analyzing attitude congruence, McBroom et al. found that with the use of simple agreement alone 43% of the students in their study perceived both parents as being in agreement with their own views about premarital sex. In contrast, when direction was added to their model, McBroom et al. discovered that of those 43% (n=86) who believed they were in agreement with both parents only 37% (n=32) perceived themselves as being in agreement that premarital sex was wrong.

As has already been discussed, if children are to internalize those values which are important to their parents, they must first understand what those values are. In reality though, how accurate are adolescents in their perception of parent attitudes and values? In what way would the findings of McBroom et al. differ had the parents' own attitudes instead been examined?

According to Acock and Bengtson (1980, p. 507), "children simply do not know their parents' opinions". Their study showed that attributed differences are much greater than those differences that actually exist. Similarly, Newcomer and Udry (1985) found that although more than half of the mothers in their sample take a liberal position on non-marital intercourse, about three-fifths of the children of these women were not aware of it.

Although the concept of congruence is becoming more popular in parent-adolescent research, how it is to be examined must be given careful consideration. The improper or inadequate use of congruency could result in erroneous conclusions by the researcher.

2.3 Synthesis of the Literature

Although parents are in a position to contribute much to the development of their children's value system, past research would indicate that they are doing little to exercise this influence in those areas that are often the most importance to them. Is it, however, accurate to conclude that parents' influence on their adolescents' sexual behavior is at best minimal, or could it be that many of our methods of measuring this influence are simply unable to detect the type of relationship that actually exists?

As McBroom et al. (1985) has demonstrated, one of the inadequacies in the research of parent-adolescent relationships may be in the method used to examine the congruency between these individuals. Although their reasoning for the importance of studying directional agreement is well conceived, there is still some question as to what model of

analysis is most capable of detecting this level of agreement. Another issue which their study fails to address is how their conclusions would differ had their comparisons been between the actual responses of the young people and their parents rather than the parents attitudes being based solely on the students perceptions? Since our behavior is largely determined by the perceptions we have, is it sufficient to only examine perceived agreement - as McBroom et al. (1985) would contend - or is the degree of attitude congruence that actually exists between adolescents and their parents also important in establishing a clearer understanding of parents' influence on their children's behavior?

The major purpose of the current study has been to address these issues with regard to adolescent sexual behavior. Using the attitudinal responses of mothers, fathers and adolescents on premarital sex, a comparison has been made of some of the methods which have been developed to analyze level of congruence. A second issue which has been addressed in this study is the importance that agreement between husbands and wives has on the sexual behavior of their adolescents. Jennings and Niemi (1974) concluded that spousal congruence increased the similarity in attitudes that existed between either parent and their adolescent, but how does agreement between husbands' and wives' relate to their teenagers' sexual behavior?

CHAPTER III

METHODS

3.1 Hypotheses

1. Mothers' sexual attitude permissiveness will be positively related to adolescent premarital sexual behavior.
2. Fathers' sexual attitude permissiveness will be positively related to adolescent premarital sexual behavior.
3. A parental agreement variable, taking into account the attitudes of both father and mother, will explain more variance in adolescent sexual behavior than the individual parents' attitudes separately.
4. The amount of variance explained in adolescent sexual behavior by parents' attitude permissiveness will be significantly increased by including adolescent attitudinal permissiveness.
5. The amount of variance explained in adolescent sexual behavior by a parental agreement variable, which takes into account the attitudes of both father and mother, will be significantly increased by including adolescent attitudinal permissiveness.
6. A simple parent-adolescent agreement model developed by McBroom et al. (1985), that takes into account only whether or not parents and their adolescent agree in their attitudes about premarital sex, will explain more variance in adolescent sexual behavior than these attitude variables will separately.
7. A directional parent-adolescent agreement model developed by McBroom et al. (1985), that takes into account not only whether parents and their adolescent are in agreement about premarital sex but also

whether premarital sex is to some degree alright or always wrong, will explain more variance in adolescent sexual behavior than would a simple agreement score.

8. Using a grouping strategy of the parent-adolescent attitude combination approach the level and direction of agreement between adolescents and their mothers and fathers will be examined with an expected difference occurring in the sexual behavior of adolescents based on the amount of parent-adolescent agreement that exists and the direction of that agreement.

9. Using a grouping strategy of the parent-adolescent attitude combination approach the importance of spousal agreement on adolescents, as stated by Jennings and Niemi (1974), will be examined with an expected difference occurring in the sexual behavior of adolescents based on the level and direction of agreement that exists between mothers and fathers.

3.2 Design

The present study was based on data previously collected by B. C. Miller (1984) for the purpose of evaluating a prevention demonstration program conducted by T. D. Olson for the Office of Adolescent Pregnancy Programs. In 1983, Olson and Wallace began the implementation of a family-centered curriculum which was taught in public high schools in the Salt Lake City, Utah and Albuquerque, New Mexico areas. In 1984 the curriculum was repeated in Salt Lake City and Albuquerque with the addition of several school districts in the Southern California area. In both 1983 and 1984 survey questionnaires

were administered during class time both prior to the implementation of the curriculum and again at the end of the semester. At about the same time as the students' post-test, parents were mailed survey questionnaires similar to those given to their children. Results of these studies may be found in greater detail in Miller's (1984) report to the Office of Adolescent Pregnancy Programs (OAPP).

As a result of the potential value this data set holds regarding parent-adolescent interaction, the present study carried out secondary analysis on the data set to determine the relationship parent-adolescent attitude congruence has with the sexual intercourse behavior of adolescents. It was hoped that from this study a better understanding might be achieved about parental influences on adolescent sexual intercourse experience. But beyond that, it was hoped that this study might also reveal insights into more appropriate methodologies for examining this complex and elusive subject.

3.3 Procedures

The adolescent sample was collected using high school students enrolled in already existing classes in 1984. Selection of schools to be used in the prevention project was based on the project director's ability to obtain approvals from administrators and teachers. Students were not allowed to complete the survey questionnaire unless parental permission was first granted. Parental permission forms were distributed with the assistance of the students themselves and then returned to the classroom where they were collected by the evaluation team.

Pretest survey questionnaires (Appendix 1) were handed out, completed, and returned, all during a single class period. Of the students present at post-test time only those in attendance at the earlier testing who had correctly completed a pretest were allowed to fill-out a post-test questionnaire (Appendix 2).

During the pretest survey, students were asked to write down the names and addresses of their parents so that their parents could also be included in the study. At the time that the posttest survey questionnaires were being completed by the high school students, a similar survey (Appendix 3) was mailed out to the parents. Survey packets sent to students' parents included: 1) a personalized cover letter which explained the purpose and importance of the parents' participation in the evaluation (Appendix 4); 2) a separate questionnaire for each parent to complete on their own; and 3) a pre-addressed, postage-paid envelope for the purpose of returning the completed questionnaires.

Using the Dillman (1978) total design method to acquire optimal survey returns, a postcard reminder/thank you was sent to parents ten days after the initial survey packets had been sent out. Three weeks after the postcards were sent out, a second survey packet (cover letter: Appendix 5) was mailed to all nonrespondents. As a final attempt to impress upon parents the importance of their participation, a certified letter (Appendix 6) was sent to nonrespondents with another complete survey packet. As a result of the follow-up procedures, out of the 1583 student pretests from which the parent sample population was derived, 58% of the parent survey packets sent out were returned in

usable form by at least one of the students' parents. Of the total student pretest sample 35% of them had usable responses from both parents.

3.4 Sample

As mentioned previously, this study consisted of adolescents who were enrolled in high schools from one of three western states; California, New Mexico, and Utah. Although the original sample had a total of 1321 pre-to-post adolescent surveys, there were 472 cases in which adolescents and both of their parents had returned usable survey questionnaires. It was this group of complete family triads which this study examined.

As can be seen in Table 1, a majority of the sample was made up of students from Utah (49%,n=230) with the remaining portion being fairly evenly divided between California (28%,n=133) and New Mexico (22%,n=107). The adolescent sample was composed of 62% (n=294) girls and 38% (n=178) boys. Although the age of adolescent respondents ranged between 14-19 years old (see Table 1), the majority of the sample consisted of teenagers between the ages of 15 and 17 (90.9%,n=426). Caucasians (whites) were by far the racial majority making up roughly 83% (n=387) of the total sample (see Table 1). The only other racial origin which accounted for any significant percentages were those of hispanic background (10%,n=45). As a result of the extreme group differences for students' race, this variable will not be considered in the study.

Table 1

Demographic Structure of 1984 Adolescent Sample

Gender of Adolescents				State of Residence			
	Code	Frequency	Percent		Code	Frequency	Percent
Male	0	178	38	New Mexico	1	107	23
Female	1	<u>294</u>	<u>62</u>	California	2	133	28
Total		472	100	Utah	3	<u>230</u>	<u>49</u>
				Total		472	100

Race of Adolescents				Age of Adolescents			
	Code	Frequency	Percent		Code	Frequency	Percent
Caucasian	1	387	82		14	17	3
Black	2	7	1		15	131	28
Hispanic	3	45	10		16	210	45
Asian	4	6	1		17	85	18
Native American	5	12	3		18	23	5
Other	6	<u>12</u>	<u>3</u>		19	<u>3</u>	<u>1</u>
Total		469	100	Total		469	100

Table 1 (continued)

Demographic Structure of 1984 Adolescent Sample

Parental Situation				Mother's Religion			
	Code	Frequency	Percent		Code	Frequency	Percent
Father & Mother	1	389	83	Catholic	1	77	16
Mother	2	2	-	Protestant	2	115	25
Father	3	1	-	Jewish	3	2	-
Mother & Stepfather	4	49	10	Mormon	4	218	46
Father & Stepmother	5	19	4	Other	5	36	8
Foster Parents	6	4	1	No Preference	6	<u>22</u>	<u>5</u>
Other	7	<u>7</u>	<u>2</u>	Total		470	100
Total		471	100				

Because the analysis for this study was dependent on having the responses of both mothers and fathers an artificially low number of single parent households exists. Although a small percentage of the adolescent sample were living with remarried parents (14%,n=68), most of the sample were adolescents living with both of their natural parents (83%,n=389). Religious preference was not asked on the 1984 adolescent surveys, but it was part of the parent questionnaire, so although there was no way of determining the religiosity of the adolescent sample it was possible to have a general notion of the religious breakdown of the adolescents using the mothers' responses (see Table 1) as an indicator. Mormons made up the largest percentage (46%,n=218), with Protestants (25%,n=115) and Catholics (16%,n=77) accounting for most of the remaining sample.

3.5 Measurement

The students' post-test questionnaire consisted of five sections which dealt with: 1) Level of support and strength existing in the students' family, 2) Degree that adolescents felt they were able to communicate with their parents, 3) The adolescents' feelings about their self esteem as well as their opinions about their ability to control their own lives, 4) The degree to which adolescents felt their parents talked with them about various aspects of adolescent sexual development and behavior, and 5) Questions to determine the adolescents attitudes about specific sexual activities and the degree to which they were actually involved in these same activities. While it was the students' post-test responses which were to be used in the analysis, it

was only on the pretest that demographic information (e.g., age, gender, race, etc.) was acquired.

Where it was possible, the various scales which were used were selected from previous research, where they had already been tested for reliability within the scale as well as between time periods. Where no adequate scale could be found, new scales were constructed and tested for appropriateness. While the parents' survey was very similar to the post-test given to their adolescent children, the parent questionnaire omitted those questions regarding feelings of self esteem and locus of control, as well as information about their own sexual behavior. As a result, questions about self esteem and locus of control were ignored in this study, nor can any comparison be made between the sexual behavior of the adolescent and the sexual behavior of their parents.

3.5a Intercourse outcome variables. The dependent variables were new scores created from original survey questions which dealt with the frequency of such behavior as necking, petting, and sexual intercourse. These survey questions had a response scale ranging between "0" (never participated in the activity) to "4" (have participated in the activity many times).

The first dependent variable was a reduced version of the original survey question dealing with sexual intercourse. This was a dichotomous variable (see Table 2) where "0" represented those students who had never had sexual intercourse, and "1" represented all students who had engaged in sexual intercourse at least once.

The second dependent variable combined the three sexual behavior questions so that not only virgin/non-virgin status can be determined

Table 2

Intercourse Outcome Variables

			Adolescent Sexual Behavior		Score	Frequency	Percent
Neck	Pet	Coitus	Description		Code		
0	0	0	Never necked, petted or coitus	1		136	32
1,2	0	0	Necked once or twice	2		33	8
3,4	0	0	Necked several or many times	3		43	10
	1,2	0	Petted once or twice	4		50	12
	3,4	0	Petted several or many times	5		48	11
		1,2	Coitus once or twice	6		45	10
		3	Coitus several times	7		37	9
		4	Coitus many times	8		<u>35</u>	<u>8</u>
			Total			427	100

Adolescent Virgin Status			
	Code	Frequency	Percent
Virgin	0	318	71
Non-Virgin	1	<u>128</u>	<u>29</u>
Total		446	100

but the degree of potential non-virgin status (how likely an adolescent was of becoming a non-virgin) will also be apparent. This variable was created through a series of IF-THEN statements (see Table 2) where: "1" was adolescents who had never necked, petted or had premarital sexual intercourse; "2" were adolescents who had been involved in light necking, but never petted or had sexual intercourse; "3" consisted of adolescents who had participated in frequent necking, but never petted or had sexual intercourse; "4" represented adolescents who had been involved in light petting, but who had never had sexual intercourse; "5" were adolescents that had participated in frequent petting, but had not had sexual intercourse; "6" represent those adolescents which had been involved, to some degree, in necking and petting, and had sexual intercourse, but only one or two times; "7" consists of adolescents that have been involved, to some degree, in necking and petting, and had sexual intercourse several times; finally, "8" included those students who had been involved, to some degree, in necking and petting, and had sexual intercourse many times.

3.5b Sexual Intercourse attitudes. In constructing the various models of analysis, attitude scores were based on the response of each family member (the adolescent and their parents, see Table 3) to the question "What is your attitude toward teenagers having full sexual relations (sexual intercourse) before marriage? Do you think it is (1) always wrong, (2) usually wrong, (3) neither right nor wrong, (4) usually all right, (5) always all right." When using the two methods of creating a congruency score which were developed by McBroom et. al. (1985) the responses to this attitudinal question were recoded

Table 3

Parent-Adolescent Sexual Intercourse Attitudes

<u>Adolescent Premarital Sexual Attitudes</u>							
	<u>Code</u>	<u>Frequency</u>	<u>Percent</u>				
Always Wrong	1	220	48				
Usually Wrong	2	78	17				
Neither Right or Wrong	3	102	22				
Usually Right	4	35	8				
Always Right	5	<u>21</u>	<u>5</u>				
Total		456	100				

<u>Mother Premarital Sexual Attitudes</u>				<u>Father Premarital Sexual Attitudes</u>			
	<u>Code</u>	<u>Frequency</u>	<u>Pct</u>		<u>Code</u>	<u>Frequency</u>	<u>Pct</u>
Always Wrong	1	340	72	Always Wrong	1	329	70
Usually Wrong	2	86	18	Usually Wrong	2	82	17
Neither Right or Wrong	3	35	8	Nether Right or Wrong	3	49	11
Usually Right	4	6	1	Usually Right	4	6	1
Always Right	5	<u>5</u>	<u>1</u>	Always Right	5	<u>5</u>	<u>1</u>
Total		472	100	Total		471	100

into a dichotomous variable where "1" equaled the traditional point of view that premarital sexual intercourse is always wrong, and "2" included all those who marked that premarital sexual intercourse is not always wrong. Scoring was the same for adolescents and their parents.

3.5c Family relationship scales. The Family Strengths Scale developed by Olson, McCubbin, Barnes, Larsen, Muxen, and Wilson (1982) was used to measure both family pride (loyalty, trust, & respect) and competence. Cronbach's Alpha for the items in this scale was 0.83, with all of the items contributing positively.

As a measure of parent-adolescent communication students responded to a 20 item scale, developed by Olson et al (1982), which concentrated on several specific aspects of communication. The questionnaire was designed so that the students could fill out the 20 item scale separately for each of their parents. Cronbach's Alpha of the items in the communication scale of 0.88.

In an attempt to find out how often parents talked to their children about issues dealing with the sexual development and behavior of adolescents, a series of questions were constructed using a Likert type of scaling. These questions covered moral values, physical development, and various aspects of sexual involvement in heterosexual relationships. These items were combined to create a composite measure of frequency of sexual communication between adolescents and their parents. The composite variable which was generated had an internal alpha reliability of 0.89 for the adolescents.

In 1984 parents alone were asked to rate the degree of discipline in raising their children. As a result, analysis did not include the

adolescents' perceptions about discipline in their home, but instead was limited to parents' opinion about their own degree of discipline.

3.6 Model Building

A basic method of analysis used in studying the influence parents have on their adolescents' sexual behavior has been to take the parents' responses and calculate the degree of relationship which exists between the response of the parent and the level of sexual behavior for the adolescent (refer to Figure 1).

While this model examines the influence of each parent separately, it ignores the degree to which parent attitudes were similar or different, and the way parent attitude agreement affects the adolescent's own attitudes and behavior. Jennings and Niemi (1974) argued that parent effects were strongest when mother and father attitudes were in agreement. It would appear then, that a more complete understanding of parents' impact on their adolescent's sexual behavior could result by adding an agreement variable.

One way in which the effect spoken of by Jennings and Niemi (1974) could be analyzed would be the addition of a parental agreement score to the previous model (see Figure 2). A score could be created by simply adding both the mother's and the father's response to a Likert-type question dealing with their attitudes about premarital sexual intercourse (coding was based on an ordinal scale of 1 to 5, where 1 = always wrong to 5 = always right). The new agreement variable would range from 2 (both mother and father believe premarital

Figure 1. Model 1: Simple Parent-Adolescent Correlational Model

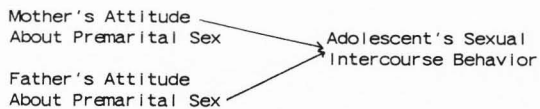
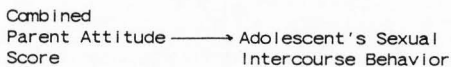


Figure 2. Model 2: Combined Parental Attitude Agreement Model



coitus to always be wrong: $1 + 1 = 2$) to 10 (both mother and father believe premarital coitus to always be right: $5 + 5 = 10$).

An extension of these models would be to include the adolescent's own sexual attitudes as an intermediate variable between the parents' attitudes and the adolescent's behavior (refer to Figures 3 & 4). Because there was evidence that parents' influence was greater on adolescents' attitudes than their behavior (Thornton & Camburn, 1983), the amount of influence parents have on adolescent sexual behavior might be better examined as an indirect force through the parents' influence on the adolescent's own attitudes.

Another method of scoring which might be helpful in examining the influence parents can have on their adolescent's behavior was a mother-father-adolescent attitude agreement score (an additive model for determining how many individuals in a triad agree on a particular issue; see Figure 5). An example of this is McBroom's et al. (1985) simple agreement scoring procedure, which could be applied in the present study as shown in Figure 6.

Use of this scoring procedure would allow partial testing of the parent agreement effect which Jennings and Niemi (1974) made reference to when they argued that parental socialization influence is most powerful when parents were in agreement with each other. This simple agreement scoring procedure fails, however, to take into account the direction of the parent-adolescent congruence. In other words, adolescents and parents who agree that premarital sex is always wrong have the same congruence score as adolescent-parent triads who agree

Figure 3. Model 3: Simple Correlational Model with Adolescent Attitudes



Figure 4. Model 4: Combined Parental Attitude Model with Adolescent Attitudes



Figure 5. Model 5: Parent-Adolescent Simple Agreement Model



Figure 6. Parent-Adolescent Simple Agreement Scoring Procedure

	<u>Adolescent</u>	<u>Mother</u>	<u>Father</u>	<u>Simple Triad Agreement Score</u>
Adolescent not in agreement with either parent	1	0	0	1
Adolescent in agreement with mother, but not father	1	1	0	2
Adolescent in agreement with father, but not mother	1	0	1	2
Adolescent in agreement with both parents	1	1	1	3

that premarital sex is not always wrong. This problem can be resolved by scoring for the direction of agreement.

Direction of agreement can be added by giving positive values for those who feel premarital sex is justified to some degree, and a negative value to respondents who view premarital sex as always wrong (McBroom et al., 1985). Figure 8 gives an example of this scoring procedure.

With this directional agreement model (see Figure 9) it was possible to evaluate the difference not only between adolescents who agreed with their parents and those who didn't, it also allowed for the direction of their agreement (see figure 3 for a comparison of the two agreement models). A weakness of this model however, was that attitude scores had to be collapsed into dichotomized responses, thus ignoring the distance or intensity of attitude differences on the original likert-type scales which were used.

In an attempt to address the limitation of dichotomizing responses, a final comparison was done where parent-adolescent attitudes were examined as categories using an analysis of variance approach. Because of the difficulty involved in attempting to combine both distance between each party and the direction of their agreement, the first step in analyzing this model was to take the five value likert-type scale and reduce it to a three item scale (where 1 = always wrong, 2 = usually wrong, and 3 = all those who responded from "neither right nor wrong" to "always all right"). By recoding the attitude variables, the end result was something a little easier to work with as

Figure 7. Parent-Adolescent Directional
Agreement Scoring Procedure

	<u>Adolescent</u>	<u>Mother</u>	<u>Father</u>	<u>Directional Triad Agreement Score</u>
Adolescent in agreement with both parents that premarital sex is always wrong	-1	-1	-1	-3
Adolescent in agreement with father that premarital sex is always wrong, but not with mother	-1	0	-1	-2
Adolescent in agreement with mother that premarital sex is always wrong, but not with father	-1	-1	0	-2
Adolescent views premarital sex as always wrong, not in agreement with either parent	-1	0	0	-1
Adolescent views premarital sex as being justified to some degree, not in agreement with either parent	+1	0	0	+1
Adolescent in agreement with mother that premarital sex is justified to some degree, but not father	+1	+1	0	+2
Adolescent in agreement with father that premarital sex is justified to some degree, but not mother	+1	0	+1	+2
Adolescent in agreement with both parents that premarital sex is justified to some degree	+1	+1	+1	+3

Figure 8. Model 6 Parent-Adolescent
Directional Agreement Model



Figure 9. Conversion from Simple Agreement
to Directional Agreement Scoring Procedures

<u>Simple Agreement</u>		<u>Directional Agreement</u>	
<u>Value</u>	<u>Description</u>	<u>Description</u>	<u>Value</u>
		both parents in agreement with adolescent that premarital sex always wrong	-3
		one parent in agreement with adolescent that premarital sex always wrong	-2
		neither parent in agreement with adolescent that premarital sex always wrong	-1
1	neither parent in agreement with adolescent	neither parent in agreement w/ adolescent that premarital sex not always wrong	+1
2	one parent in agreement with adolescent	one parent in agreement w/ adolescent that premarital sex not always wrong	+2
3	both parents in agreement with adolescent	both parents in agreement w/ adolescent that premarital sex not always wrong	+3

well as a not so lop-sided count for each cell. Rather than attempting to create an ordinal or interval scale through some additive process, the first stage of this model development was to define all possible combinations of the mother-father-adolescent triad and examine each of these combinations with the assumption that they were separate categories in a new nominal variable which was created. The new variable was generated as follows: If the adolescent feels that premarital sex is always wrong (1) and the mother also feels that it is always wrong (1) and the father also feels that it is always wrong (1), then their new score would be a 1; if on the other hand the adolescent and the mother both feel that premarital sex is always wrong (1), but the father feels that it is not always wrong but only usually wrong (2), then their new combined attitude score would be a 2. This was continued until 27 combined attitude categories were created.

It is important to point out that the values assigned each possible combination were not additive in any way but rather were arbitrary values in the same way that gender might be coded "1" for females and "2" for males. The coding assignment in its entirety is demonstrated in figure 4. The 27 categories were then compared to determine similarities and differences regarding the direction of attitude for each person in the triad and from this comparison an attitude grouping was established to examine the relationship of a combination of the different parent-adolescent attitude agreement categories with adolescent sexual behavior.

Figure 10. Parent-Adolescent Attitude
Combination Scoring Procedure

<u>adolescent's response</u>	<u>mother's response</u>	<u>father's response</u>	<u>category</u>
1	1	1	1
1	1	2	2
1	1	3	3
1	2	1	4
1	2	2	5
1	2	3	6
1	3	1	7
1	3	2	8
1	3	3	9
2	1	1	10
2	1	2	11
2	1	3	12
2	2	1	13
2	2	2	14
2	2	3	15
2	3	1	16
2	3	2	17
2	3	3	18
3	1	1	19
3	1	2	20
3	1	3	21
3	2	1	22
3	2	2	23
3	2	3	24
3	3	1	25
3	3	2	26
3	3	3	27

A second grouping of the categories was based only on the parents attitude combinations. This second grouping was done to examine the relationship between the various parent agreement categories and the sexual behavior of the adolescents. This was an attempt to examine the conclusions of Jennings and Niemi (1974) about spousal agreement and adolescent attitudes extending this idea to the sexual behavior of adolescents.

3.7 Plan of Analysis

Analysis followed the order just described in the Model Building section. Each model was run four separate times using a hierarchical method of regression analysis. The first run of each model consisted of the primary independent variable being entered on the sexual behavior score separately to determine the level of unique variance accounted for in the dependent variable. In the second run, demographic information (gender, age, father's education, level of church attendance, and parental situation in the home) about the adolescents were loaded in with the primary independent variables. For the third run, in addition to the primary independent variable and the demographic information a series of variables were included which related to adolescents' perceived quality of relationship in their families (strength of the family, quality of parent-adolescent communication, parents as sources of sexual information, and the frequency of discussion parents had with their adolescent about various aspects of sex). Because of the strong relationship between adolescents' attitudes and their own sexual behavior, the attitudes of

the adolescents were included only in the final run. The virgin status scores were examined using a grouped t-test procedure to determine if there was a significant mean difference between virgins and non-virgins for each of the models discussed.

The quality of family relations indicators were collected from both the adolescents as well as their mothers and fathers. For this reason the regression models where the relationship of mothers' and fathers' attitudes were examined alone were each done two times; first with the adolescents' responses, second with the specific parents' responses. However, because of the lack of significance found in the parent models, references to the regression analysis results will always be about the adolescents' models unless stated otherwise.

Discussion about the background and quality of family relations indicators was based on the significance of each factor on the adolescents' sexual behavior scores in isolation as well as their contribution to the overall regression analysis procedures. When examined in isolation each factor was analyzed using either an analysis of variance, t-test or regression procedure depending on which was most appropriate.

For the exploratory attitude combination model mentioned at the end of the Model Building section, visual examination of cross-tabulation tables and frequency counts were used to determine what groupings of the categories would be of most interest. Those categorical groupings which were selected were used as independent variables in an analysis of variance on the sexual behavior scores of the adolescents.

CHAPTER IV

RESULTS AND DISCUSSION

Each model developed in the preceding section was analyzed in two separate ways. First, a multiple regression procedure was used to examine the sex behavior scores computed for each adolescent. The second dependent variable of interest was the adolescents' virgin status. This was analyzed using a grouped t-test procedure. Both of these procedures were done with the SPSSx statistical package. Comparisons of the models were based on tests of differences between the various regression coefficients. The models were first compared using only the variables discussed in the model section. A follow-up comparison was made looking at each model in the presence of demographic and quality of family relations indicators.

4.1 Findings within Models

4.1a Model 1: Simple parental attitude correlation. When this model was developed it was felt that by loading the parents' individual attitudes about premarital sexual intercourse together into the same regression model, it would be possible to better understand the unique contribution of each parent on adolescents' sexual behavior. However, because of the high correlation that exists between spouses attitudes ($r = .646$, $p < .001$), the relationship of the fathers' attitudes with the adolescent's sexual behavior shifted from a significantly strong positive slope to almost no slope at all. When the fathers' attitudes were included with the mothers' there was only an increase of about

0.3% in the total variance explained, an increase hardly representative of the actual contribution that the fathers' attitudes have. As a result, the parents' attitudes were examined separately.

When viewed individually as shown in tables 4 and 5, the mothers' premarital sexual attitudes had a Beta = .247 ($p < .01$) which accounted for just under 6% of the total variance in the adolescents' sexual behavior scores, while the fathers' attitudes had a Beta = .204 ($p < .01$) accounting for close to 4% of the total variance. Although the amount of variance accounted for by either parent was minimal, the findings do support the predicted outcomes for the first and second hypotheses; both mothers' and fathers' sexual attitude permissiveness was positively related to adolescent premarital sexual behavior.

A grouped t-test on mothers' and fathers' premarital sexual intercourse attitudes by the virgin status of their adolescents revealed significantly different mean attitude scores. Adolescents who had not had sexual intercourse had mothers ($\bar{x}_{\text{bar}} = 1.283$) and fathers ($\bar{x}_{\text{bar}} = 1.356$) with premarital sexual attitudes that were significantly more conservative than the mothers ($\bar{x}_{\text{bar}} = 1.703$) and fathers ($\bar{x}_{\text{bar}} = 1.679$) of adolescents who had reported having had premarital sexual intercourse, $t_{\text{mother}}(446) = 4.45$, $p < .01$ and $t_{\text{father}}(445) = 3.53$, $p < .01$.

4.1b Model 2: Combined parental attitude score. Although fathers' and mothers' attitudes were both significantly related to the sexual behavior of adolescents, this accounts for only a portion of the relationship which exists. Because of the problem of high correlation in spouses' attitudes toward premarital sexual intercourse, it would

Table 4

Regression Model of Adolescent Sexual Behavior Scores using Mothers' Premarital Sexual Intercourse Attitudes (Adolescents' Responses to the Family Relations Information)

	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>
1. Mother's Sex Attitude	.844	.247**	.481	.140**	.538	.157**	.237	.069
2. Demographics								
Gender			.058	.011	-.151	-.030	.090	.018
Age			.550	.205**	.542	.202**	.493	.184**
Father's Education			-.320	-.063	-.285	-.056	-.163	-.032
Church Attendance			-.375	-.196**	-.378	-.198**	-.082	-.043
Parent Situation			-.793	-.122*	-.637	-.097*	-.380	-.058
3. Family Relations (Adolescents' responses)								
Family Strengths					-.180	-.053	.047	.013
Mom-Teen Communication					-.550	-.177**	-.475	-.153*
Source of Sex Info					-.179	-.084	-.120	-.056
Parents Talk About Sex					.537	.217**	.431	.174**
4. Teen's Sex Attitude							.931	.449**
R^2_{adj}	.058		.151		.202		.343	

* $p < .05$. ** $p < .01$.

Table 5

Regression Model of Adolescent Sexual Behavior Scores using Fathers' Premarital Sexual Intercourse Attitudes (Adolescents' Responses to the Family Relations Information)

	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>
1. Father's Sex Attitude	.649	.204**	.325	.102*	.323	.101*	.035	.011
2. Demographics								
Gender			.072	.014	-.102	-.020	.112	.022
Age			.566	.211**	.527	.196**	.477	.178**
Father's Education			-.269	-.053	-.220	-.043	-.113	-.022
Church Attendance			-.414	-.216**	-.449	-.234**	-.130	-.068
Parent Situation			-.762	-.116*	-.575	-.087	-.371	-.056
3. Family Relations (Adolescents' responses)								
Family Strengths					-.169	-.049	.008	.002
Dad-Teen Communication					-.476	-.158*	-.330	-.109
Source of Sex Info					-.203	-.096	-.142	-.067
Parents Talk About Sex					.528	.212**	.406	.163**
4. Teen's Sex Attitude							.951	.460**
R^2_{adj}	.039		.141		.188		.335	

* $p < .05$. ** $p < .01$.

seem that one solution to better understanding the parents' combined attitudes might be derived through the creation of an additive score. This was done by taking both spouses actual responses to the 5-value Likert-type attitude question and adding them together. As table 6 shows the new variable ranged between 2 (both mother and father believe premarital coitus to always be wrong: $1 + 1 = 2$) and 10 (both mother and father believe premarital coitus to always be right: $5 + 5 = 10$). With this additive model a Beta = .248 ($p < .01$) was generated which accounted for just under 6% of the total variance in the adolescents' sex behavior scores (see table 7). When the combined attitude scores were compared by the virgin status of the adolescents, parents of non-virgin adolescents had a combined mean score ($x_{\text{bar}} = 3.382$) which was significantly more liberal than that for parents of virgin adolescents ($x_{\text{bar}} = 2.634$), $t(445) = 4.45$, $p < .01$.

4.1c Model 3: Simple parent correlation with adolescents' attitudes. Another way that the relationship between parents' premarital sexual attitudes and adolescents' sexual behavior might be better understood would be to include the adolescents' own premarital sexual attitudes in the regression model. When adolescents' attitudes were first considered alone, a Beta = .528 ($p < .01$) was generated explaining nearly 28% of the total variance occurring in the adolescents' sexual behavior score. A significant difference was also found between the attitudes of non-virgin adolescents ($x_{\text{bar}} = 3.078$) and their virgin counter-parts ($x_{\text{bar}} = 1.619$), $t(446) = 13.93$, $p < .01$. When the relationship of parents' attitudes with the adolescents' own

Table 6

Combined Parent Premarital Sexual Attitude Score

<u>Combined Parent Sexual Attitudes</u>		
<u>Code</u>	<u>Frequency</u>	<u>Percent</u>
2	302	64
3	47	10
4	59	13
5	29	6
6	23	5
7	6	1
8	2	-
9	0	-
10	<u>3</u>	<u>1</u>
Total	471	100

Table 7

Regression Model of Adolescent Sexual Behavior Scores using the
Combined Parent Premarital Sexual Intercourse Attitude Scores

	b	Beta	b	Beta	b	Beta	b	Beta
1. Combined Parent Sex Attitude	.450	.248**	.255	.141**	.264	.146**	.083	.046
2. Demographics								
Gender			.082	.016	-.128	-.025	.090	.018
Age			.574	.214**	.549	.205**	.501	.187**
Father's Education			-.271	-.053	-.243	-.048	-.126	-.024
Church Attendance			-.379	-.198**	-.404	-.211**	-.110	-.057
Parent Situation			-.700	-.106*	-.552	-.084	-.365	-.055
3. Family Relations (Adolescents' responses)								
Family Strengths					-.001	-.000	.163	.048
Dad-Teen Communication					-.371	-.123	-.227	-.075
Mom-Teen Communication					-.365	-.116	-.355	-.113
Source of Sex Info					-.176	-.083	-.115	-.054
Parents Talk About Sex					.547	.220**	.431	.173**
4. Teen's Sex Attitude							.931	.450**
R^2_{adj}	.059		.150		.200		.339	

* $p < .05$. ** $p < .01$.

Table 8

Correlation Coefficients for Premarital Sexual Attitudes

	Adolescent Attitude	Mother Attitude	Father Attitude	Combined Parent Attitude
Adolescent Attitude	1.000			
Mother Attitude	0.366*** (456)	1.000		
Father Attitude	0.385*** (455)	0.646*** (471)	1.000	
Combined Parent Attitude	0.415*** (455)	0.901*** (471)	0.912*** (471)	1.000

*** $p < .001$.

sexual attitudes (see table 8) were examined individually: mothers produced a Beta = .366 ($p < .01$) accounting for about 13% of the total variance in the adolescents' sexual intercourse attitudes, while the fathers accounted for 14.5% of the total variance with a Beta = .385 ($p < .01$).

However, when adolescents' sexual attitudes were included separately with mothers' and then fathers' attitude scores in predicting the sexual behavior of the adolescents, the attitude scores of each parent only improved the amount of explained variance in adolescents' sexual behavior scores by about 0.5% over that accounted for by the adolescents' own attitudes alone (refer back to tables 4 and 5). This would indicate that the majority of variance in adolescents' sex behavior scores which was explained by parents' premarital sexual attitudes was a result of the relationship that existed between their attitudes and the adolescents' own attitudes about sex.

4.1d Model 4: Combined parent attitude with adolescents' attitudes. Similar to the third model, the addition of the adolescents' own premarital sexual attitudes to the parent agreement score may better clarify the amount of contribution being made by this additive model. When the effect of the combined parent attitude score was considered with respect to the adolescents' own sexual attitudes a Beta = .415 ($p < .01$) was produced, accounting for about 17% of the total variance existing in the adolescents' attitudes. If, however, the parent agreement score was included with the adolescents own attitudes about premarital sex in attempting to explain the variance in the

adolescents' sex behavior scores, the amount of increase in variance accounted for was only about 1% (refer back to table 7).

4.1e Model 5: Parent-adolescent simple agreement. Another approach to examining this relationship between parent attitudes and adolescent sexual behavior would be to concentrate on the agreement aspect of the parent-adolescent relationship. One way of doing this is the simple agreement model developed by McBroom et al. (1985).

This model only considers whether adolescents were in agreement with their parents or not. The score was generated by taking the 5 value Likert-type attitude scores of both the adolescents and their parents and recoding these into dichotomous variables where: 1) premarital sexual intercourse always wrong, and 2) premarital sexual intercourse not always wrong (see table 9). It was this method of simple agreement which McBroom et al. stated was, "the approach most widely employed in inter-generational research", and in many ways was similar to the correlational approach used in previous research.

When the relationship between the triadic simple agreement score and the adolescents' sexual behavior score was examined, the simple agreement score had a Beta = $-.297$ ($p < .01$) accounting for 8.5% of the variance in the adolescents' behavior (see table 10). Thus, as more of the family members considered here are in agreement, adolescent sexual behavior is likely to be more conservative. A comparison of parent-adolescent simple agree scores by adolescents' virgin status showed that the mean number of family members in agreement was significantly different for virgin adolescents ($\bar{x}_{\text{vir}} = 2.481$) compared to non-virgin adolescents ($\bar{x}_{\text{non-vir}} = 1.937$), $t(446) = 6.21$, $p < .01$.

Table 9

Parent-Adolescent Simple Agreement Score

Description	Code	Frequency	Percent
Neither parent in agreement with adolescent	1	132	28
Mother or father in agreement w/ adolescent	2	65	14
Both parents in agreement with adolescent	3	275	58
Total		472	100

Table 10

Regression Model of Adolescent Sexual Behavior Scores using the
Parent-Adolescent Simple Agreement Score

	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>
1. Parent-Adolescent Simple Agreement	-.817	-.297**	-.630	-.229**	-.582	-.211**
2. Demographics						
Gender			-.006	-.001	-.213	-.042
Age			.530	.198**	.501	.187**
Father's Education			-.159	-.031	-.144	-.028
Church Attendance			-.387	-.202**	-.426	-.223**
Parent Situation			-.886	-.135**	-.738	-.112*
3. Family Relations (Adolescents' responses)						
Family Strengths					-.006	-.001
Dad-Teen Communication					-.295	-.098
Mom-Teen Communication					-.337	-.107
Source of Sex Info					-.162	-.076
Parents Talk About Sex					.557	.224**
R^2_{adj}	.085		.184		.225	

* $p < .05$. ** $p < .01$.

4.1f Model 6: Parent-adolescent directional agreement. While the triadic simple agreement score did take into consideration whether parents were in agreement with their adolescent, it failed to recognize the direction of that agreement. As a result, no differentiation was made between those parents who were in agreement with their adolescent that premarital sexual intercourse was always wrong and those parents who were in agreement with their adolescent that premarital sex was not always wrong. This dilemma was resolved with a directional model developed by McBroom et al. (1985). By adding a negative value to all simple agreement scores where the adolescent felt premarital sex was wrong and leaving those values positive where the adolescent felt premarital sex was not always wrong, it was possible to take into consideration direction of agreement as well as the number in agreement (see table 11).

Table 12 shows that when the triadic directional agreement score was examined, with respect to the adolescents' sexual behavior score, a Beta = .513 ($p < .01$) was generated, which accounted for 26% of the total variance in the sex behavior scores. There was also a significant difference in direction of parent-adolescent agreement for those adolescents who reported being virgins ($x_{\text{bar}} = -1.072$) when compared to those who reported being non-virgins ($x_{\text{bar}} = 1.468$), $t(446) = 13.29$, $p < .01$. Since the adolescents' sexual attitudes were involved in the creation of both the simple and directional variables, there was no need to repeat these models with the attitudes of the adolescents' added in.

Table 11

Parent-Adolescent Directional Agreement Score

Description	Code	Frequency	Percent
Both parents in agreement with adolescent that premarital sex is always wrong	-3	185	39
Mother or father in agreement w/ adolescent that premarital sex is always wrong	-2	20	4
Neither parent in agreement with adolescent that premarital sex is always wrong	-1	15	3
Neither parent in agreement with adolescent that premarital sex is <u>not</u> always wrong	+1	117	25
Mother or father in agreement w/ adolescent that premarital sex is <u>not</u> always wrong	+2	45	10
Both parents in agreement with adolescent that premarital sex is <u>not</u> always wrong	+3	90	19

Table 12

Regression Model of Adolescent Sexual Behavior Scores using the
Parent-Adolescent Directional Agreement Score

	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>
1. Parent-Adolescent Directional Agreement	.507	.513**	.480	.486**	-.446	-.451**
2. Demographics						
Gender			.065	.013	-.082	-.016
Age			.524	.196**	.507	.189**
Father's Education			-.120	-.023	-.110	-.021
Church Attendance			-.000	-.000	-.055	-.029
Parent Situation			-.431	-.065	-.355	-.054
3. Family Relations (Adolescents' responses)						
Family Strengths					-.036	-.010
Dad-Teen Communication					-.147	-.048
Mom-Teen Communication					-.272	-.087
Source of Sex Info					-.183	-.086
Parents Talk About Sex					.434	.174**
R^2_{adj}	.261		.295		.316	

* $p < .05$. ** $p < .01$.

4.2 Demographics and Quality of Family Relations Indicators

While each of the sexual intercourse attitude models were significantly related to the adolescents' sexual behavior score when examined in isolation, much of the variance which was accounted for by each model may be better explained through the differences that exist in adolescents' backgrounds or in the quality of their family relationships (Hoge et al., 1982). Using the sexual behavior score in a multiple regression procedure, the influence of each of these factors was examined.

4.2a Gender. When the actual difference in sexual intercourse attitudes of adolescent males and females is compared to the expected values no relationship existed (refer to table 13), it is apparent that there are more females that responded conservatively than would be expected and more liberally responding males than anticipated (Chi squared (4, $n = 456$) = 19.78, $p < .001$). Although this gender difference translates over to the virgin status of males and females, with Chi squared (1, $n = 446$) = 5.13, $p < .05$ where there are more non-virgin males and more virgin females than expected (see table 14), no gender difference was found for the more comprehensive sexual behavior scores of adolescents (refer to table 15), Chi squared (7, $n = 427$) = 12.14, $p > .05$. When adolescents' sexual behavior was more broadly defined (including necking and petting activity), it is interesting that although there was no significant gender differences there are some unusual trends in the sample as indicated in table 15. While males are more likely than expected to have had sexual intercourse than females, they are also more likely than females to have had no activity at all.

Table 13

Adolescent Premarital Sexual Attitudes by Gender

	Code	Males		Females		Row Total
		Observed	Expected	Observed	Expected	
Always Wrong	1	73	83	142	137	220
Usually Wrong	2	19	29	59	49	78
Neither Right or Wrong	3	41	38	61	64	102
Usually Right	4	20	13	15	22	35
Always Right	5	<u>14</u>	8	<u>7</u>	13	<u>21</u>
Column Total		172		284		456

Table 14

Adolescent Virgin Status by Gender

	Code	Males		Females		Row Total
		Observed	Expected	Observed	Expected	
Virgin	0	110	120	208	198	318
Non-Virgin	1	<u>59</u>	49	<u>69</u>	79	<u>128</u>
Column Total		169		277		446

Table 15

Adolescent Sexual Behavior Scores by Gender

	Code	Males		Females		Row Total
		Observed	Expected	Observed	Expected	
No Activity	1	58	51	78	85	136
Light Necking	2	12	12	21	21	33
Heavy Necking	3	9	16	34	27	43
Light Petting	4	14	19	36	31	50
Heavy Petting	5	15	18	33	30	48
Intercourse 1 or 2 times	6	19	17	26	28	45
Intercourse Several Times	7	18	14	19	23	37
Intercourse Many Times	8	<u>15</u>	13	<u>20</u>	22	<u>35</u>
Column Total		160		267		427

On the other hand, females are higher than expected in most categories involving any intimate activity of a lesser nature to actual intercourse. It must be restated however that these findings are not significant and could be nothing more than random error. Since gender was included only in the regression models for adolescents' sexual behavior scores, no significance was found for gender in any of the primary models analyzed (refer to tables 4, 5, 7, 10, and 12).

4.2b Age. The age of the adolescent was consistently significant in accounting for variance in the adolescents' sexual behavior scores. The regression coefficients for age (average across models not including adolescent attitudes: Beta = .205, $p < .01$) indicate that older adolescents were more sexually active (refer to tables 4, 5, 7, 10, and 12). The sexual behavior of adolescents was increasingly more permissive the older the age cohort with the exception of the 14 year old group (refer to table 16); a result possibly occurring because most Utah high schools are only three year institutions with students typically not entering high school until they are 15 years old.

4.2c Fathers' education. The only information obtained in the study which would indicate the adolescents socio-economic background was an ordinal variable which was used to determine the educational level of the parents. Fathers' education was dummy coded to determine if there was any difference in sexual activity between adolescents whose fathers had only completed high school or less, compared to those whose fathers had acquired additional education.

There was a significant difference between adolescents whose fathers had not gone beyond high school ($x_{\text{bar}} = 4.07$) and those whose

Table 16

Oneway Analysis of Variance for Adolescent Sexual Behavior
Scores by Age of Adolescents

	Count	Mean	Std Dev
14 years old	15	3.73	2.60
15 years old	115	3.34	2.25
16 years old	193	3.41	2.33
17 years old	77	4.37	2.54
18 & 19 years old	<u>24</u>	<u>5.62</u>	<u>2.08</u>
Total	424	3.70	2.41

Source of Variation	d.f.	Sum of Squares	Mean Squares	F Ratio
Between Age Groups	4	153.59	38.39	6.93***
Within Age Groups	419	2319.72	5.53	
Total	423	2473.31		

 $p < .001$.

fathers had ($\bar{x}_{\text{bar}} = 3.43$) when fathers' education was considered alone, $t(396) = 2.57$, $p < .01$. However, this difference was lost in the total regression models (refer back to models 4, 5, 7, 10, and 12). It must, however, be kept in mind that this was at best a weak indicator of socio-economic status.

4.2d Adolescents' church attendance. While church attendance is not a background variable it was a strong predictor (see table 17), and thus it was considered important that it be included. Attendance was measured on an ordinal scale that ranged from a response of "1" indicating the adolescent never attended church, to a "5" which indicated that the adolescent attended church more than once a week.

In all but the parent-adolescent directional agreement model church attendance of the adolescent (average of other models not including adolescent attitudes: Beta = $-.203$, $p < .01$) was found to be significant in accounting for variance in the sex behavior of the adolescents (refer to models 4, 5, 7, 10, and 12). The relationship between adolescents church attendance and their sex behavior scores was inverse; as church attendance increased the level of sexual activity decreased. For the directional agreement model, the lack of significance was most likely due to the relatively high correlation ($r = -.543$, $p < .01$) between the level of church attendance for adolescents and the amount of directional agreement that existed in their families.

4.2e Parental situation in the home. The last background variable examined was the parental situation in the adolescents' homes. This was measured by asking who adolescents currently lived with. The

Table 17

Oneway Analysis of Variance for Adolescent Sexual Behavior
Scores by Church attendance of Adolescents

	Count	Mean	Std Dev
Never attend	53	4.52	2.68
Attend less than once a month	66	4.68	2.23
Attend once or twice a month	55	4.67	2.62
Attend once a week	187	3.11	2.19
Attend more than once a week	<u>66</u>	<u>2.90</u>	<u>1.98</u>
Total	427	3.70	2.41

Source of Variation	d.f.	Sum of Squares	Mean Squares	F Ratio
Between Attendance Groups	4	257.89	64.47	12.23***
Within Attendance Groups	422	2223.73	5.26	
Total	426	2481.63		

 . p<.001.

nominal variable was dummy coded to compare adolescents who lived with both of their natural parents to those living in alternative family settings (step-parents, single parents, etc.). When the effect of parental situation on the adolescents' sexual behavior score was considered alone, those adolescents who were living with both of their natural parents had significantly lower sexual behavior scores ($\bar{x}_{\text{bar}} = 3.50$) compared to adolescents who had an alternative parental situation ($\bar{x}_{\text{bar}} = 4.61$), $t(426) = 3.67$, $p < .001$.

The adolescents' parental situation was significant for each of the sexual intercourse attitude models (refer to tables 4, 5, 7, and 10) except for the parent-adolescent directional agreement model (average for other models not including adolescent attitudes: Beta = $-.119$, $p < .05$). Again, the lack of significance (refer to table 12) in the directional model was probably a result of a fairly high correlation between the two independent variables ($r = -.219$, $p < .01$), where there was an overlap in the variance accounted for by the direction and level of agreement adolescents have with their parents and the parental situation that exists in the adolescents' home.

4.2f Background factors in the presence of adolescents' sexual attitudes. When adolescents' own attitudes about premarital sexual intercourse were included in the models which dealt specifically with parental attitudes about premarital sex, the only background variable which continued to explain a significant amount of variance was the age of the adolescent (refer back to tables 4, 5, 7, 10, and 12). It would appear that the other variables which were significant alone had a large amount of overlap with respect to adolescents' own attitudes.

4.2g Family strengths. In none of the models were adolescents' perceptions regarding unity in their families found to be an important unique predictor of adolescents' sex behavior scores. While the strength of the family was significantly related to adolescents' sexual behavior scores when examined by itself ($Beta = -.168$, $p < .001$), it had no significant influence, as measured here, on the sexual activity of adolescents when in the presence of other factors (refer to tables 4, 5, 7, 10, and 12); particularly the communication variables with which perceived family strengths was highly related.

4.2h Parent-adolescent communication. Adolescents' perceptions of their ability to communicate with each parent was related to adolescents' sexual behavior scores when examined alone, with mothers ($Beta = -.144$, $p < .01$) and fathers ($Beta = -.168$, $p < .001$) both having a significant amount of influence on their adolescents' sexual behavior. However, when parents' communication was examined in the overall regression model there was significance only in conjunction with the parent's own attitudes about premarital sex. In other words, fathers' abilities to communicate were significant (see table 5) only in the model which examined fathers' premarital sexual attitudes ($Beta = -.158$, $p < .05$), while mothers' abilities to communicate were significant ($Beta = -.177$, $p < .01$) only in the model examining the impact of mothers' premarital sexual attitudes (see table 4).

4.2i Parents as a source of sexual information. The importance of parents as sources of sexual information was analyzed through two separate measurements. The first measurement was a single ordinal variable which ranged from "1" (parents had no contribution to an

adolescent's understanding of sexual behavior) to "5" (nearly all of an adolescent's understanding about sexual behavior was the result of their parents). This variable had no apparent influence on the level of sexual activity experienced by adolescents whether examined alone (see table 18) or when added to the overall regression models (refer back to tables 4, 5, 7, 10, and 12).

The second measurement was a composite variable, made up of ordinal survey items dealing with the frequency that parents discussed various sexual topics with the adolescents. This frequency of sexual conversation variable was significant for every model (average for all models without adolescent attitudes included: Beta = .209, $p < .01$), and while these findings were similar to those of other researchers (Inazu & Fox, 1980), it was a relationship that was hard to interpret. The analysis found that as parents' discussion level increased, the sexual activity of the adolescents also increased. It would appear that the significance of this variable was a result of interaction with the other factors, because when frequency of parent-adolescent sexual conversation was examined alone (Beta = .089, $p > .05$) the influence it has was greatly reduced. In fact, other researchers have suggested that the direction of this relationship might be dependent on the nature of the parents' attitudes and the resulting discussions they are likely to have with their children (Fox, 1981). Miller, Norton, Dyk, McCoy & Olson (1987) found that parental discussions with adolescents about sexual topics are positively related to adolescent sexual behavior when parents hold liberal attitudes, but the relationship was reversed when parents held conservative attitudes.

Table 18

Oneway Analysis of Variance for Adolescent Sexual Behavior
Scores by Percent of Sexual Information Adolescents Reported
having Received from Parents

	Count	Mean	Std Dev
No sex information from parents	72	3.84	2.33
	90	3.71	2.54
Half of sex information from parents	180	3.87	2.35
	42	3.21	2.57
Almost all sex inform- ation from parents	<u>41</u>	<u>3.09</u>	<u>2.34</u>
Total	425	3.69	2.41

Source of Variation	d.f.	Sum of Squares	Mean Squares	F Ratio
Between Information Levels	4	31.68	7.92	1.36
Within Information Levels	420	2444.55	5.82	
Total	424	2476.23		

4.2j Number of parental rules. The only indicator of parental supervision available in the 1984 study was parents' responses to a survey question dealing with the number of rules parents had about their adolescents' dating (no rules to many rules). When adolescent sexual behavior was examined in the presence of this ordinal variable no significant relationship was found (refer to tables 19 and 20). This was probably not so much an indication that parental supervision was a poor predictor of adolescent behavior, as it was a question about the effectiveness of this variable.

4.2k Quality of family relations in the presence of adolescents' sexual attitudes. When the premarital sexual attitudes of the adolescents' were included in the models, the only quality of family relations indicator that continued to account for a significant portion (refer to tables 4, 5, 7, 10, and 12) of the variance in the adolescents' sex behavior scores was the frequency of sexual conversation variable. While the influence of the sexual communication variable was affected by the adolescents' sexual attitudes, it continued to be significant (average for those models involved: Beta = .170, $p < .01$).

4.3 Findings between Models

Although all of the sexual attitude models examined the same relationship, each model took a unique approach in its measurement of the relationship between parental attitudes and the sexual behavior of adolescents. A primary purpose of this study was to determine which of the models examined most accurately interprets the relationship which

Table 19

Regression Model of Adolescent Sexual Behavior Scores using Mothers' Premarital Sexual Intercourse Attitudes (Mothers' Responses to the Family Relations Information)

	b	Beta	b	Beta	b	Beta	b	Beta
1. Mother's Sex Attitude	.834	.237**	.426	.121*	.522	.148**	.152	.043
2. Demographics								
Gender			.029	.005	-.173	-.034	.064	.013
Age			.538	.199**	.525	.195**	.499	.185**
Father's Education			-.395	-.078	-.333	-.066	-.165	-.033
Church Attendance			-.383	-.199**	-.375	-.200**	-.050	-.026
Parent Situation			-.852	-.130**	-.835	-.127*	-.552	-.084
3. Family Relations (Mothers' responses)								
Family Strengths					-.113	-.027	-.032	-.007
Mom-Teen Communication					-.307	-.069	-.164	-.037
Source of Sex Info					-.196	-.076	-.134	-.005
Parents Talk About Sex					.294	.106	.306	.110*
Mother's Rules					.088	.032	.069	.025
4. Teen's Sex Attitude							1.042	.501**
R^2_{adj}	.053		.149		.155		.339	

* $p < .05$. ** $p < .01$.

Table 20

Regression Model of Adolescent Sexual Behavior Scores using Fathers' Premarital Sexual Intercourse Attitudes (Fathers' Responses to the Family Relations Information)

	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>	<u>b</u>	<u>Beta</u>
1. Father's Sex Attitude	.638	.198**	.294	.091	.334	.103	.006	.002
2. Demographics								
Gender			.050	.010	.055	.011	.244	.049
Age			.538	.201**	.538	.201**	.452	.168**
Father's Education			-.392	-.079	-.439	-.088	-.288	-.058
Church Attendance			-.397	-.210**	-.394	-.209**	-.069	-.037
Parent Situation			-.834	-.128*	-.709	-.109*	-.487	-.075
3. Family Relations (Fathers' responses)								
Family Strengths					-.343	-.086	.148	.037
Dad-Teen Communication					-.072	-.017	-.116	-.028
Source of Sex Info					.126	.050	.090	.036
Parents Talk About Sex					.159	.062**	.180	.071**
Father's Rules					-.038	-.014	-.071	-.028
4. Teen's Sex Attitude							.989	.480**
R^2_{adj}	.036		.140		.143		.309	

* $p < .05$. ** $p < .01$.

took place. In table 21 it is evident that there was a wide diversity in the amount of variance accounted for by the different models. As a way of measuring these differences comparisons of the models were done using a z score value which tests for significant differences between pairs of correlation coefficients (\underline{r}). The procedure first transforms the r values into a new variable z' , defined as

$$z' = \frac{[\ln(1 + r) - \ln(1 - r)]}{2}$$

where r was the observed value of the correlation coefficient. After this transformation has been done for each value of r, the standard error of the difference between the two independent z' values of interest is given by the formula

$$\text{Std Err } z'_1 - z'_2 = [(n_1 - 3) + (n_2 - 3)]^{0.5}$$

The difference between the two z' values can then be tested by taking z'_1 minus z'_2 and dividing by the standard error of the difference, defined as

$$z = (z'_1 - z'_2) / \text{Std Err } z'_1 - z'_2$$

With the new value z, significance of the difference between the two r's can be determined.

The two parts of model one are probably the simplest approach to analyzing the impact of parental attitudes. The variables used were the parents' own responses about their feelings toward premarital sexual intercourse. A comparison of these separate parental attitude scores indicated that mothers' and fathers' attitudes had no significant difference in the amount explained variance accounted for in adolescents' sexual behavior. However, these did not address the

Table 21

Simple Regression Coefficients for the Principle
Variables from each Model

	b	Beta	R ² _{adj.}	F
<u>Model 1a</u>				
Mother's Attitude	.844	.247**	.058	29.15**
<u>Model 1b</u>				
Father's Attitude	.649	.204**	.039	20.21**
<u>Model 2</u>				
Combined Attitude	.450	.248**	.059	31.52**
<u>Model 3a</u>				
Mother's (Mothers)	.233	.070	.064	
Attitude (Adolescents)	1.029	.503**	.279	
w/ Teen's			.280	83.80**
<u>Model 3b</u>				
Father's (Fathers)	.063	.020	.046	
Attitude (Adolescents)	1.066	.520**	.279	
w/ Teen's			.276	82.11**
<u>Model 4</u>				
Combined (Parent Comb.)	.098	.054	.069	
Attitude (Adolescents)	1.035	.862**	.279	
w/ Teen's			.278	82.98**
<u>Model 5</u>				
Simple Agreement	-.817	-.297**	-.085	41.72**
<u>Model 6</u>				
Direction Agreement	.507	.513**	.261	145.72**

**p<.01.

amount of combined influence spouses have as a result of the level agreement that exist between them.

As discussed earlier, one method of examining the effect of this spousal agreement was to simply add the husbands' and wives' premarital sexual attitude scores together as was done in model 2. Combining the parents attitude scores together would enable the parents' joint contribution to be examined. But, because of the high correlation between husbands and wives attitudes this new variable only slightly increased the amount of variance that was being accounted for (see table 22 for the comparative differences in r : combined versus fathers alone, $z = .64$, $p > .05$; combined versus mothers alone, $z = .02$, $p > .05$). Part of the problem with this variable was that it is actually a poor estimator of agreement, and instead is an indicator of parents' combined level of liberality. When additive models such as this are used, the major flaw is that there are several ways of arriving at the same score. As a result the findings in this study do not support the assumptions made in the third hypothesis, that an additive model would increase the amount of variance explained.

While adolescents' premarital sexual attitudes were an important component in the understanding of parents' influence on the adolescents' sexual behavior, it created a major problem when added to the parents' attitudes in a multiple regression procedure, as was done in models 3a, 3b and 4. As was predicted in hypotheses 4 and 5 the addition of the adolescents' own attitudes drastically increased the amount of variance accounted for in the sexual behavior of adolescents (father with adolescent versus father alone, $z = 5.39$, $p < .01$; mother

Table 22

Z Score Comparisons of Sexual Attitude Models

	<u>Model 1a</u>	<u>Model 1b</u>	<u>Model 2</u>	<u>Model 3a</u>	<u>Model 3b</u>	<u>Model 4</u>	<u>Model 5</u>
<u>Model 1a</u> Mother's Attitude	-0-						
<u>Model 1b</u> Father's Attitude	0.61	-0-					
<u>Model 2</u> Combined Attitude	0.02	0.64	-0-				
<u>Model 3a</u> Mother's Attitude w/ Teen's	4.85**	5.46**	4.80**	-0-			
<u>Model 3b</u> Father's Attitude w/ Teen's	4.78**	5.39**	4.73**	0.06	-0-		
<u>Model 4</u> Combined Attitude w/ Teen's	4.81**	5.43**	4.77**	0.02	0.04	-0-	
<u>Model 5</u> Simple Agreement	0.75	1.36	0.72	4.06**	3.99**	4.03**	-0-
<u>Model 6</u> Directional Agreement	4.37**	4.97**	4.32**	0.36	0.29	0.33	3.60**

**
p<.01.

with adolescent versus mother alone, $z = 4.85$, $p < .01$; and combined parent with adolescent versus combined parent alone, $z = 4.77$, $p < .01$). However, almost all of the relationship that existed between parents' attitudes and the adolescents' sexual behavior was accounted for by the adolescents' own premarital sexual attitudes. As a result, when the adolescents' attitudes were included in models 3 and 4 the majority of the variance previously accounted for in models 1 and 2 by the parents' sexual attitudes disappeared.

One way of including the adolescents' attitudes without confounding the influence of the parents' attitudes was the use of the parent-adolescent simple agreement score (McBroom et al., 1985) as was done in model 5. This variable ignored what the actual attitudes of the parents and the adolescents were and simply took into consideration whether the three family members were in agreement or not. McBroom et al. created this variable as a way of showing the fallacy of most current research on the effect of parent-adolescent agreement on adolescent behavior. While there was a significant relationship between the number of parents in agreement with the adolescent and the adolescents' sexual behavior, the simple agreement score gave no indication what the agreement or disagreement is about. As a result this model offered no additional explained variance over those models that considered only the parents attitudes (compare model 5 with models 1a, 1b and 2 on table 22). Thus the assumptions made in hypothesis six were not justified by the findings in this study.

The addition of attitudinal direction to the agreement variable made it possible to determine not only how many in the parent-

adolescent triad were in agreement, but also whether that agreement was, to some degree, in favor of or opposed to premarital sex. Figure 1 illustrates how the values in the simple agreement score were regrouped when examined within the directional agreement model.

A comparison of the two agreement scores and their effect on adolescents' sexual behavior supported the assumptions made in hypothesis 7 with significant differences in the two models ability to account for variation in the adolescents' sexual behavior ($z = 3.60$, $p < .01$). The reasons for this difference can be seen when the two scoring procedures are compared side by side as shown in table 23.

When direction of agreement was considered (denoted by the addition of the positive and negative values in table 23) the amount of information about parent-adolescent agreement changed significantly. Although there were 275 family triads in complete agreement using the simple scoring procedure, 90 of those families were in agreement that sex was not always wrong while the remaining 185 families were in agreement that premarital sex was always wrong.

With the directional agreement model there was as much variance accounted for as was in those models where adolescents' original attitude responses were included. But, where the influence of parental attitudes was lost in those other models, with the directional agreement model a clearer relationship was established.

Comparing the outcome of the directional agreement scores done in this study and the same procedure as reported in the study by McBroom et al. (1985), a noticeable difference is observed between the two findings; in the study by McBroom et al. the directional agreement

Table 23

Simple and Directional Agreement Comparison

<u>Simple Agreement</u>		<u>Directional Agreement</u>	
<u>value</u>	<u>count</u>	<u>count</u>	<u>value</u>
		185	-3
		20	-2
		15	-1
1	132	117	+1
2	65	45	+2
3	275	90	+3

measure indicated greater agreement in the liberal direction. In part this is attributable to the fact that McBroom et al. used adolescents' perceptions about parental attitudes while this study used parents' own responses, but it may also be partially the result of a difference in samples. While their sample appears to be more liberal than the average, the sample in this study was a more conservative group of adolescents. The sample was made up of high school students in California, New Mexico and Utah, but nearly half of the sample were from Utah (see table 1) and most of these were members of the Church of Jesus Christ of Latter-day Saints (Mormons).

A major limitation of this model was that the directional agreement scoring procedure was limited to dichotomous responses, in comparison to using the original responses. This limiting factor forced modification of the original Likert-type responses, resulting in a loss in the amount of available information. While some attitudinal comparisons were possible using this approach, there is no way of capturing the more subtle differences that actually exist between the attitudes of each family member.

4.4 Parent-Adolescent Attitude Categorical Combination Model

Another approach to parent-adolescent congruence is the scoring procedure which was mentioned at the end of the Model Building section. This procedure was of an exploratory nature. The idea behind this model was to maintain more of the ordinal precision contained in the original responses; compared to the dichotomous reduction necessary for use of the agreement scores by McBroom et al.. Partially because of

the large number of possible combinations that would result as well as the skewed distribution of the responses, the sexual attitude variables were reduced to a three value scale and organized into all possible combinations of the adolescent-mother-father attitude responses (see table 24). By assigning each combination of parent-adolescent attitudes a nominal value code it was possible to examine several different agreement strategies, using the various grouping arrangements as categorical variables.

Of the several grouping strategies considered two were selected because they were the most appropriate combinations for addressing the assumptions found in hypotheses 8 and 9. The first examined the attitudes of the parents in conjunction with the adolescent, while the second examined differences with respect to the direction of agreement within the spousal relationship.

For the first model, categories were grouped according to whether: 1) all three parties (mother, father, and the adolescent) were in agreement that premarital sex was always wrong; 2) the adolescent was more conservative in their attitudes than at least one of the parents; 3) all three parties were in agreement that premarital sex is usually wrong; 4) that the adolescent was more liberal in their attitudes than at least one of their parents; and 5) that all three parties were in agreement that sex is generally all right (see table 25). When the parent-adolescent triads were grouped in this manner, an overall significant difference was observed ($F = 45.67$, $p < .01$), with individual differences occurring between the first two and last two groups when the Scheffe procedure for multiple range testing was used. Based on

Table 24

Parent-Adolescent Attitude Combination Scores

All Possible Attitude Triad Combinations					
Adolescent Attitude	Mother Attitude	Father Attitude	Code	Frequency	Percent
1	1	1	1	185	41
1	1	2	2	8	2
1	1	3	3	4	1
1	2	1	4	7	2
1	2	2	5	13	3
1	2	3	6	0	-
1	3	1	7	1	-
1	3	2	8	1	-
1	3	3	9	1	-
2	1	1	10	36	8
2	1	2	11	6	1
2	1	3	12	1	-
2	2	1	13	8	2
2	2	2	14	15	3
2	2	3	15	7	2
2	3	1	16	0	-
2	3	2	17	0	-
2	3	3	18	4	1
3	1	1	19	70	15
3	1	2	20	11	2
3	1	3	21	7	2
3	2	1	22	5	1
3	2	2	23	18	4
3	2	3	24	10	2
3	3	1	25	5	1
3	3	2	26	8	2
3	3	3	27	24	5
			Total	472	100

Attitudes of all three parties are based on "1" being those who believe premarital sex to always be wrong, "2" represent those who feel premarital sex is usually wrong, and "3" are those who responded that premarital sex is generally alright.

Table 25

Mean Adolescent Sexual Behavior Scores by
Parent-Adolescent Attitude Agreement Grouping

	Count	Mean	Std Dev
All three parties agree sex is always wrong	178	2.29	1.71
Adolescent less liberal than at least one parent	41	3.26	1.93
All three parties agree sex is usually wrong	15	3.86	1.73
Adolescent more liberal than at least one parent	174	5.00	2.28
All three parties agree sex is generally alright	<u>18</u>	<u>6.00</u>	<u>2.58</u>
Total	426	3.70	2.41

Source of Variation	d.f.	Sum of Squares	Mean Squares	F Ratio
Between Triad Groups	4	750.14	187.53	45.67***
Within Triad Groups	421	1728.59	4.10	
Total	425	2478.73		

The categorical independent variable used in this model was generated by taking groups 1, 14, and 27 in the attitude combination variable and using them as categories 1, 3, and 5, respectively and then combining groups 2 through 9, 12, 15, and 18 for category 2, and combining groups 10, 11, 13, and 19 through 26 of the attitude combination variable for category 4.

A significant heterogeneity of variance was found for this anova model using Cochran's C (.3087, $p < .01$), thus interpretation of the model should be made with caution.

*** $p < .001$.

this grouping arrangement, there appears to be a strong relationship between whether adolescents were in agreement with their parents as well as the direction that the agreement was in. Thus the assumption stated in hypothesis eight, that adolescent sexual behavior would be different based on the degree and direction of parent-adolescent agreement that existed, was justified.

In the second grouping arrangement, the categories were based on the level and direction of agreement that existed between husbands and wives. Categories were defined as: 1) both mother and father in agreement that premarital sex is always wrong; 2) both mother and father in agreement that premarital sex is usually wrong; 3) the mother is more conservative than the father with respect to premarital sexual intercourse; 4) the father is more conservative than the mother with respect to premarital sexual intercourse; and 5) both mother and father in agreement that premarital sex is generally all right (see table 26). Overall, there was a significant difference between the categories ($F = 11.1071$, $p < .01$), with individual differences occurring between the first category and the last three categories when compared with the Scheffe procedure for multiple range testing. From this it can be concluded that the assumptions made in hypothesis 9, that adolescent sexual behavior will differ based on spousal agreement, are appropriate. The most important element in this last grouping arrangement was whether parents were in agreement; where adolescents with the most conservative sexual behavior scores were more likely to have parents that both agreed premarital sex always wrong, and those with the most liberal sexual behavior scores belonging to the parents

Table 26

Mean Adolescent Sexual Behavior Scores by
Husband and Wife Attitude Agreement Grouping

	Count	Mean	Std Dev
Both agree premarital sex is always wrong	279	3.22	2.28
Both agree premarital sex is usually wrong	45	3.97	2.16
Mother more conservative than father	49	4.42	2.34
Mother more liberal than father	31	5.22	2.43
Both agree premarital sex is generally alright	<u>22</u>	<u>5.50</u>	<u>2.65</u>
Total	426	3.70	2.41

Source of Variation	d.f.	Sum of Squares	Mean Squares	F Ratio
Between Spousal Groups	4	236.61	59.15	11.10***
Within Spousal Groups	421	2242.11	5.32	
Total	425	2478.73		

The categorical independent variable used in this model was generated by by combining groups 1, 10, and 19 of the attitude combination variable for category 1; groups 5, 14, and 23 for category 2; groups 2, 3, 6, 11, 12, 15, 20, 21 and 24 for category 3; groups 4, 7, 8, 13, 16, 17, 22, 25, and 26 for category 4; and combining groups 10, 11, 13, and 19 through 26 of the attitude combination variable for category 5.

*** $p < .001$.

who were in agreement that premarital sex was generally all right.

While these two groupings don't fully address the original goals of this model (to develop a procedure which more effectively examines how the degree of disagreement in the parent-adolescent triad influences adolescent sex behavior), they do demonstrate the potential which this type of model development could hold for the analysis of family behavior.

CHAPTER V

SUMMARY

The purpose of the present study was two-fold. The first objective was to examine the relationship that existed between parents' attitudes about premarital sexual intercourse and their adolescents' sexual behavior. The second objective, which was closely related to the first, was to determine an optimal method of analyzing this relationship. Because there are many different ways of conceptualizing the association between these two variables, a comparison of several alternative approaches was performed.

5.1 Conclusions

While previous research has typically used a simple correlational approach in the examination of parents' attitudes and adolescents' behavior, the findings of this study illustrate that this is a weak indicator of the relationship that is actually occurring. The amount of variance in adolescents' sexual behavior accounted for was much less than expected when correlated separately with the attitudes of both mothers and fathers. These findings generate some uncertainty about the utility of this procedure even though a significant relationship was detected between the sexual behavior of adolescents and the attitudes of their parents as predicted in hypotheses 1 and 2. To limit an examination of this relationship to such basic analysis, as most previous research has done, would mean overlooking much of the potential interaction that occurs between these two variables.

The association between parents' premarital sexual attitudes and adolescents' sexual behavior is often realized only when it is considered through mediating factors. An example of this was seen in the testing of hypothesis 4 where adolescents' own attitudes about premarital sexual intercourse were included with the parents' attitudes in a multiple regression model. The introduction of the adolescents' own attitudes virtually eliminated the relationship that existed between parents' attitudes and adolescents' sexual behavior. Thus, the majority of variance explained by the parents' attitudes was primarily due to the relationship that existed with the adolescents' attitudes. For this reason it is important to consider the congruence between the attitudes of adolescents and their parents if the variance in adolescents' sexual behavior explained by parents' attitudes is to be understood.

One approach used to examine the effect of adolescents' attitudes was the already mentioned multiple regression model - a model in which attitudes of both parents and teens were entered together as independent variables. While this approach established the importance of adolescents' own premarital sexual attitudes, it revealed little information about how these attitudes affected the relationship between parents' attitudes and the adolescents' sexual behavior.

Two alternatives to the multiple regression method that were examined in this study were the parent-adolescent simple agreement and directional agreement models developed by McBroom et al. (1985). These dichotomized agreement/non-agreement tally systems were based on how many members of the mother-father-adolescent triad were in agreement.

While the simple agreement model was able to indicate the amount of congruence that was present in the family triad, it gave no information regarding what the agreement was about. As a result, the simple agreement model was unable to account for any more explained variance in the adolescents' sexual behavior than that accounted for by the simple correlational approach taken in model 1. This was evident by the rejection of the sixth hypothesis.

The unique way that the attitudes of each family member were considered in the directional agreement model, in contrast to the simple agreement model, allowed for a greater degree of interpretation regarding the relationship between the attitudes of adolescents and parents and the sexual behavior of adolescents. This increased ability to interpret congruence is what made this model superior to the other models used even though it yielded no more explained variance in adolescent sexual behavior than those models in which adolescents' attitudes were included with each parents' attitudes.

From the analysis of the directional agreement model there was strong support for the notion that adolescents' sexual behavior was highly associated with whether or not adolescents were in agreement with their parents. The more congruence that existed among family members about premarital sexual intercourse being, to some extent, all right, the more likely an adolescent was to be sexually active. In contrast, the more congruence about premarital sexual intercourse always being wrong, the greater the likelihood that an adolescent was not sexually active. These conclusions are further supported by the analysis done in testing the eighth hypothesis in which the grouping

strategy of the categorical combination model was used to consider how the response of each family member compared with those of the other family members (more liberal, same as others, more conservative). These findings revealed that sexual behavior was significantly different for adolescents when congruence between the adolescents and their parents was considered.

Another aspect of this study that supported the importance of parents in adolescents' sexual behavior was the examination of spousal agreement regarding premarital sexual intercourse. In the model developed to test the third hypothesis, which was the first attempt to address spousal agreement, problems in conceptualization prevented a clear examination of the contribution from husbands' and wives' agreement. When mothers' and fathers' responses to the premarital sexual question were added together, this new variable was unable to detect any unique variance explained in adolescent sexual behavior. This resulted in the variable being more a measurement of combined parent liberality than a measurement of the congruence construct. The confusion that occurred was caused by too many possible combinations for arriving at the same result. Further in the study, however, the categorical combination model was again used. This time the examination of adolescents' sexual behavior was based only on the agreement that existed between their parents. In this test of hypothesis 9 a difference was found for parents who were in agreement at either extreme of the attitude measure (always wrong verses generally all right). These parents were more likely to have children whose behavior reflected those extreme attitudes.

To understand how parents' attitudes are related to their adolescents' sexual behavior, it is not enough to simply run correlations between these variables; several other factors need to be considered. The attitudes of the adolescents were found to be important components in understanding this relationship, but these attitudes must be included with caution. Measurements which allow the contribution of parents' attitudes to be enhanced by adolescents' attitudes rather than masked because of them need to be used. Congruence is another concept which was found to be beneficial in the examination of parental input in adolescents' decisions about sexual behavior. While this study has demonstrated the usefulness of this concept, there is still need for further refinement in how congruence is measured. Finally, parents are important to adolescents' decision-making process regarding sexual behavior. While it was not the purpose or the capability of this study to examine all of the factors that contribute to the relationship between parents' premarital sexual attitudes and adolescents' sexual behavior, there was strong evidence that when parents are in agreement with each other, they are more likely to have adolescents whose behavior is in line with those attitudes. It also follows that as adolescents are in agreement with the attitudes held by their parents the behavior they exhibit will be more likely to reflect those attitudes.

5.2 Limitations of the Study

Although this study was able to advance much of our understanding regarding parents' contribution to adolescents' level of sexual

behavior, the cross-sectional structure limited the ability to make conclusions regarding causation. Without longitudinal data it was impossible to know if parents are in reality influencing their children's behavior or if there was instead some other explanation for the relationship that was present. For example, parents' attitudes may be modified by the realization that their adolescent is already sexually active. Also, there could be some external factor (e.g., religiosity) influencing both the parents and the adolescents.

Another limitation of this study is the absence of the adolescents' perceptions of their parents' premarital sexual attitudes. To understand the influence that one individual has on a second individual, it is important to consider three things: 1) what the first person actually believes, 2) what the second person actually believes, and 3) what the second person perceives that the first person believes. It was this third component that the present study lacked. Having this component allows a better understanding of the relationship that is actually occurring between the other two. When the adolescents' perceptions of the parents' attitudes are included, the influence of parents' attitudes is more clearly understood. It must be pointed out, though, that the perceptions of attitudes are just as incomplete without information about the actual attitudes.

Last, while several attempts have been made in this study to define the congruence that exists, all of these efforts have been lacking in one way or another. For one thing, none of the models took into full consideration the total breadth of information that was available; they were all forced to collapse the attitudinal data. As

simplification occurs for the sake of analysis, the ability to accurately interpret the findings becomes more risky. The attitude categorical combination model would seem to have the greatest potential for extracting the congruence that actually exists in the parent-adolescent relationship. The present study only explored a few of the possible ways that this model could be used.

5.3 Implications

The emphasis of this study was to demonstrate that there are various ways of examining the relationship that exists between variables when using data from family dyads and triads. To become fixed in a single method of analysis may be potentially limiting to the researcher. This is particularly evident in the examination of congruence. While this notion of attitude agreement is important to the understanding of parent-adolescent relationships, it is important to interpret carefully what the variables being used are actually explaining.

This study also showed that regardless of the direction in parents' attitudes, if husbands and wives are in agreement, adolescents are likely to have attitudes and behavior that reflect the attitudes of their parents. As a result, parents must become more aware of the image they are projecting to their children. To do this, parents must first examine what they consider important and each parent must then compare their values with the values of their spouse. By understanding the degree of unity that exists between themselves with respect to their values and how they are presenting those values to their

children, parents can develop a much clearer picture of what they want their children to value.

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APPENDIXES

Appendix A.
Student Pretest Survey (General
Information Only)

Please Print Clearly:

Your name _____

Parents' name(s) _____

Your address _____
(street)

_____ (city) (state) (zip)

Your phone _____

School _____

Teacher's name _____

(Please remove this page after filling it out. Then
complete the rest of the survey.)

ANC PRETEST

To the student: The purpose of this survey is to help better understand teen attitudes about their families and morality. Your answers to the questions will be kept strictly confidential. Your name will never be associated with your answers. Please respond to every item by circling or writing in the most accurate response.

Section 1: General Information

1. Are you male or female? Circle one:

- 1. male
- 2. female

2. What is your race or ethnic background? Circle one:

- 1. white
- 2. black
- 3. hispanic
- 4. oriental
- 5. native american
- 6. other _____

3. How old are you? Circle one: 14 15 16 17 18 19

4. What grade are you in school? Circle one:

- grade 8
- grade 9
- grade 10
- grade 11
- grade 12

5. What are your plans for future schooling?

- 1. not graduate from high school
- 2. graduate from high school
- 3. go to trade or vocational school
- 4. go to college
- 5. graduate from college
- 6. get graduate or professional training
- 7. don't know

6. What is the highest grade of education your father completed?

1. didn't graduate from high school
2. graduated from high school
3. went to trade or vocational school
4. went to college
5. graduated from college
6. had graduate or professional training
7. don't know

7. What is the highest grade of education your mother completed?

1. didn't graduate from high school
2. graduated from high school
3. went to trade or vocational school
4. went to college
5. graduated from college
6. had graduate or professional training
7. don't know

8. About how often do you attend religious services now?

1. never
2. less than once a week
3. once or twice a month
4. once a week
5. more than once a week

9. Who are you living with now?

1. both father and mother
2. your mother only
3. your father only
4. your mother and step-father
5. your father and step-mother
6. your spouse
7. your foster parents
8. other (please write in) _____

10. Write in the total number of brothers and sisters you have. _____

11. Are you currently:

1. single, never married
2. married
3. divorced
4. separated
5. other

Appendix B.
Student Posttest Survey

Teacher's name: _____

STUDENT POSTTEST 84

Student's Name _____

TO THE STUDENT: You have already completed a survey like this, but this one is much shorter. Again, your answers to the questions will be kept strictly confidential. Please respond to every item by circling or writing in the most accurate response. Detach this cover page to remove your name before beginning.

Thank you.

STUDENT POSTTEST 84

Section 1: Family Relations

INSTRUCTIONS: For each of the statements below please circle the number that most accurately describes your family now.

	<u>Almost Never</u>	<u>Once in Awhile</u>	<u>Some- times</u>	<u>Fre- quently</u>	<u>Almost Always</u>
1. We can express our feelings in our family.	1	2	3	4	5
2. We tend to worry about many things in our family.	1	2	3	4	5
3. We really do trust and confide in each other.	1	2	3	4	5
4. We have the same problems over and over in our family.	1	2	3	4	5
5. Family members feel loyal to each other.	1	2	3	4	5
6. Accomplishing what we want to do seems difficult for the family.	1	2	3	4	5
7. We are critical of each other.	1	2	3	4	5
8. We share similar values and beliefs as a family.	1	2	3	4	5
9. Things work out well for us as a family.	1	2	3	4	5
10. Family members respect one another.	1	2	3	4	5
11. There are many conflicts in our family.	1	2	3	4	5
12. We are proud of our family.	1	2	3	4	5

Section 2: Parent-teen Communication

INSTRUCTIONS: Circle on number for each parent to show how much you agree or disagree with each statement. Use the codes at the right:

- 1 = Strongly Disagree (SD)
 2 = Moderately Disagree (MD)
 3 = Neither Agree Nor Disagree (N)
 4 = Moderately Agree (MA)
 5 = Strongly Agree (SA)

	Mother					Father				
	<u>SD</u>	<u>MD</u>	<u>N</u>	<u>MA</u>	<u>SA</u>	<u>SD</u>	<u>MD</u>	<u>N</u>	<u>MA</u>	<u>SA</u>
1. I can discuss my beliefs with my mother/father <u>with</u> out feeling restrained or embarrassed.	1	2	3	4	5	1	2	3	4	5
2. Sometimes I have trouble believing everything my mother/father tells me.	1	2	3	4	5	1	2	3	4	5
3. My mother/father is always a <u>good</u> listener.	1	2	3	4	5	1	2	3	4	5
4. I am <u>sometimes</u> afraid to ask my mother/father for what I want.	1	2	3	4	5	1	2	3	4	5
5. My mother/father has a tendency to say things to me which would be <u>better</u> left unsaid.	1	2	3	4	5	1	2	3	4	5
6. My mother/father <u>can</u> tell how I'm feeling without asking.	1	2	3	4	5	1	2	3	4	5
7. I am <u>very</u> satisfied with how my mother/father and I talk together.	1	2	3	4	5	1	2	3	4	5
8. If I were in trouble, I <u>could</u> tell my mother/father.	1	2	3	4	5	1	2	3	4	5

	Mother					Father				
	SD	MD	N	MA	SA	SD	MD	N	MA	SA
9. I openly show affection to my mother/father.	1	2	3	4	5	1	2	3	4	5
10. When we are having a problem, I often give my mother/father the <u>silent treatment</u> .	1	2	3	4	5	1	2	3	4	5
11. I am <u>careful</u> about what I say to my mother/father.	1	2	3	4	5	1	2	3	4	5
12. When talking to my mother/father I have a tendency to say things that would be <u>better left unsaid</u> .	1	2	3	4	5	1	2	3	4	5
13. When I ask questions, I get <u>honest answers</u> from my mother/father.	1	2	3	4	5	1	2	3	4	5
14. My mother/father <u>tries to</u> understand my point of view.	1	2	3	4	5	1	2	3	4	5
15. There are <u>topics I avoid</u> discussing with my mother/father.	1	2	3	4	5	1	2	3	4	5
16. I find it <u>easy to discuss</u> problems with my mother/father.	1	2	3	4	5	1	2	3	4	5
17. It is very easy for me to express all my <u>true feelings</u> to my mother/father.	1	2	3	4	5	1	2	3	4	5
18. My mother/father <u>nags/bothers me</u> .	1	2	3	4	5	1	2	3	4	5
19. My mother/father <u>insults me</u> when she/he is angry with me.	1	2	3	4	5	1	2	3	4	5
20. I <u>don't think I can tell</u> my mother/father how I really feel about things.	1	2	3	4	5	1	2	3	4	5

 Section 3: Personal Feelings

 INSTRUCTIONS: Please circle the number that best describes how you feel.

	<u>Strongly</u> <u>Disagree</u>	<u>Moderately</u> <u>Disagree</u>	<u>Neutral</u>	<u>Moderately</u> <u>Agree</u>	<u>Strongly</u> <u>Agree</u>
1. I feel that I'm a person of worth, at least on an equal basis with others.	1	2	3	4	5
2. I feel that I have a number of good qualities.	1	2	3	4	5
3. All in all, I'm inclined to feel that I'm a failure.	1	2	3	4	5
4. I am able to do things as well as most other people.	1	2	3	4	5
5. I feel I do not have much to be proud of.	1	2	3	4	5
6. I take a positive attitude toward myself.	1	2	3	4	5
7. On the whole, I am satisfied with myself.	1	2	3	4	5
8. I wish I could have more respect for myself.	1	2	3	4	5
9. I certainly feel useless at times.	1	2	3	4	5
10. At times I think I am no good at all.	1	2	3	4	5
11. Do you believe that most problems will solve themselves if you just don't fool with them?	1	2	3	4	5

	<u>Strongly Disagree</u>	<u>Moderately Disagree</u>	<u>Neutral</u>	<u>Moderately Agree</u>	<u>Strongly Agree</u>
12. Are you often blamed for things which just aren't your fault?	1	2	3	4	5
13. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?	1	2	3	4	5
14. Do you feel that most of the time parents listen to what their children have to say?	1	2	3	4	5
15. When you get punished does it usually seem it's for no good reason at all?	1	2	3	4	5
16. Most of the time do you find it hard to change a friend's (mind) opinion?	1	2	3	4	5
17. Do you feel that it is nearly impossible to change your parents' mind about anything?	1	2	3	4	5
18. Do you feel that when you do something wrong there's very little you can do to make it right?	1	2	3	4	5
19. Do you believe that most kids are born good at sports?	1	2	3	4	5
20. Do you feel that one of the best ways to handle most problems is just not to think about them?	1	2	3	4	5
21. Do you feel that when a kid your age decides to hit you, there's little you can do to stop him or her?	1	2	3	4	5

	<u>Strongly Disagree</u>	<u>Moderately Disagree</u>	<u>Neutral</u>	<u>Moderately Agree</u>	<u>Strongly Agree</u>
22. Have you felt that when people were mean to you it was usually for no reason at all?	1	2	3	4	5
23. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?	1	2	3	4	5
24. Do you believe that when bad things are going to happen they are just going to happen no matter what you do to try to stop them?	1	2	3	4	5
25. Most of the time do you find it useless to try to get your way at home?	1	2	3	4	5
26. Do you feel that when someone your own age wants to be your enemy there's little you can do to change matters	1	2	3	4	5
27. Do you usually feel that you have little to say about what you get to eat at home?	1	2	3	4	5
28. Do you feel that when someone doesn't like you there is nothing you can do about it?	1	2	3	4	5
29. Do you usually feel it is almost useless to try in school because most other children are just plain smarter than you are?	1	2	3	4	5

	<u>Strongly</u> <u>Disagree</u>	<u>Moderately</u> <u>Disagree</u>	<u>Neutral</u>	<u>Moderately</u> <u>Agree</u>	<u>Strongly</u> <u>Agree</u>
30. Are you the kind of person who believes that planning ahead makes things turn out better?	1	2	3	4	5
31. Most of the time, do you feel that you have little to say about what your family decides to do?	1	2	3	4	5

 Section 4: Family Education, Attitudes and Behavior

	<u>Never</u>	<u>Seldom</u>	<u>Some- times</u>	<u>Often</u>	<u>Very Often</u>
32. Do either of your parents talk with you about what it means to act <u>responsibly</u> ?	1	2	3	4	5
33. Do either of your parents talk with you about the meaning of <u>just and unjust</u> behavior?	1	2	3	4	5
34. Do either of your parents talk with you about their <u>sexual values and beliefs</u> ?	1	2	3	4	5
35. Do either of your parents talk with you about your <u>sexual development</u> (bodily changes, menstruation, etc.)?	1	2	3	4	5
36. Do either of your parents talk with you about <u>necking</u> (prolonged hugging and kissing) before marriage?	1	2	3	4	5
37. Do either of your parents talk with you about <u>petting</u> before marriage?	1	2	3	4	5
38. Do either of your parents talk with you about <u>full sexual relations</u> before marriage?	1	2	3	4	5

	<u>Always Wrong</u>	<u>Usually Wrong</u>	<u>Neither Right nor Wrong</u>	<u>Usually Right</u>	<u>Always Right</u>
39. What is your attitude about necking before marriage?	1	2	3	4	5
40. What is your attitude about petting before marriage?	1	2	3	4	5
41. What is your attitude about having full sexual relations (sexual intercourse) before marriage?	1	2	3	4	5

	<u>No, Never</u>	<u>Yes, Once</u>	<u>Yes, Twice</u>	<u>Yes, Several Times</u>	<u>Yes, Many Times</u>
42. Have you been involved in necking?	1	2	3	4	5
43. Have you been involved in petting?	1	2	3	4	5
44. Have you had full sexual relations?	1	2	3	4	5

Thank you for your cooperation.

Appendix C.
Parent Survey

_____ ID # Section 1: General Information

1. Please circle whether you are:

1. male
2. female

2. What is your current marital status? Are you:

1. married
2. single, never married
3. divorced
4. separated
5. widowed
6. other (please write in) _____

3. Who lives with your family?

1. spouse and children
2. your children only
3. your children and step children
4. other (please write in) _____

4. What is your religious preference?

1. Catholic
2. Protestant
3. Jewish
4. Mormon
5. Other _____
6. No preference

5. About how often do you attend religious services now?

1. never
2. less than once a month
3. once or twice a month
4. once aa week
5. more than once a week

 Section 2: Family Relations

Instructions: For each of the statements below, please circle the number that most accurately describes your family now.

	<u>Almost Never</u>	<u>Once in Awhile</u>	<u>Some- times</u>	<u>Fre- quently</u>	<u>Almost Always</u>
1. We can express our feelings.	1	2	3	4	5
2. We tend to worry about many things.	1	2	3	4	5
3. We really do trust and confide in each other.	1	2	3	4	5
4. We have the same problems over and over.	1	2	3	4	5
5. Family members feel loyal to the family.	1	2	3	4	5
6. Accomplishing what we want to do seems difficult for us.	1	2	3	4	5
7. We are critical of each other.	1	2	3	4	5
8. We share similar values and beliefs as a family.	1	2	3	4	5
9. Things work out well for us as a family.	1	2	3	4	5
10. Family members respect one another.	1	2	3	4	5
11. There are many conflicts in our family.	1	2	3	4	5
12. We are proud of our family.	1	2	3	4	5

 Section 3: Parent-teen Communication

Instructions:

Circle the one response for each statement that best describes the relationship between you and your teenager who took this survey in school. Use the following scale:

- 1 = Strongly Disagree (SD)
 2 = Moderately Disagree (MD)
 3 = Neither Agree Nor Disagree (N)
 4 = Moderately Agree (MA)
 5 = Strongly Agree (SA)
-

	<u>SD</u>	<u>MD</u>	<u>N</u>	<u>MA</u>	<u>SA</u>
1. I can discuss my beliefs with my teenager without <u>feeling restrained</u> or embarrassed.	1	2	3	4	5
2. Sometimes I have trouble <u>believing everything</u> my teenager tells me.	1	2	3	4	5
3. I am always a <u>good listener</u> .	1	2	3	4	5
4. My teenager is <u>sometimes afraid</u> to ask me for what he/she wants.	1	2	3	4	5
5. I have a tendency to say things to my teenager which would be <u>better left unsaid</u> .	1	2	3	4	5
6. I can tell how my teenager <u>feeling</u> without asking.	1	2	3	4	5
7. I am <u>very satisfied</u> with how my teenager and I talk together.	1	2	3	4	5

is

	<u>SD</u>	<u>MD</u>	<u>N</u>	<u>MA</u>	<u>SA</u>
8. If my teenager was in trouble, I would <u>listen openly</u> .	1	2	3	4	5
9. I openly <u>show affection</u> to my teenager.	1	2	3	4	5
10. When we are having a prob- lem, I often give my teenager the <u>silent treatment</u> .	1	2	3	4	5
11. I am <u>careful about what I</u> <u>say</u> to my teenager.	1	2	3	4	5
12. When talking to my teenager, I have a tendency to say things that would be <u>better left unsaid</u> .	1	2	3	4	5
13. When my teenager asks questions, I give him/ her <u>honest answers</u> .	1	2	3	4	5
14. I <u>try to understand</u> my teenager's point of view.	1	2	3	4	5
15. There are <u>topics I avoid</u> discussing with my teenager.	1	2	3	4	5
16. I find it <u>easy to discuss</u> problems with my teenager.	1	2	3	4	5
17. It is very easy for me to express all my <u>true feelings</u> to my teenager.	1	2	3	4	5
18. I sometimes <u>nag/bother</u> my teenager.	1	2	3	4	5
19. I sometimes <u>insult</u> my teenager when I'm angry.	1	2	3	4	5
20. I <u>don't think I can tell</u> my teenager how I really feel about somethings.	1	2	3	4	5

 Section 4: Family Education and Attitudes

1. Do you as a parent have rules about who, when, and how often your teenager dates? (circle a number)

no rules			moderate number of rules		many rules
1	2	3	4	5	

2. How much of your teenager's sex information comes from you as a parents?

no information from us			half from us, half other sources		almost all from us
1	2	3	4	5	

3. About how old was your teenager when you first talked with him/her about sexual relations between men and women?

1. 6 years old or younger
2. 7-8 years old
3. 9-10 years old
4. 11- 12 years old
5. 13 years old or older
6. haven't really talked with him/her

- | | <u>Never</u> | <u>Seldom</u> | <u>Some-
times</u> | <u>Often</u> | <u>Very
Often</u> |
|----------------------------------------------------------------------------------------|--------------|---------------|------------------------|--------------|-----------------------|
| 4. Do you talk with your teenager about what it means to act <u>responsibly</u> ? | 1 | 2 | 3 | 4 | 5 |
| 5. Do you talk with your teenager about the meaning of <u>just and just behavior</u> ? | 1 | 2 | 3 | 4 | 5 |

- | | <u>Never</u> | <u>Seldom</u> | <u>Some-
times</u> | <u>Often</u> | <u>Very
Often</u> |
|---------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|------------------------|--------------|-----------------------|
| 6. Do you talk with your teen-
ager about your <u>sexual values</u>
and beliefs? | 1 | 2 | 3 | 4 | 5 |
| 7. Do you talk with your teen-
ager about their <u>sexual</u>
<u>development</u> (bodily changes,
menstruation, etc.)? | 1 | 2 | 3 | 4 | 5 |
| 8. Do you talk with your teen-
ager about <u>necking</u> (prolonged
hugging and kissing) before
marriage? | 1 | 2 | 3 | 4 | 5 |
| 9. Do you talk with your teen-
ager about <u>petting</u> before
marriage? | 1 | 2 | 3 | 4 | 5 |
| 10. Do you talk with your teen-
ager about <u>full sexual</u>
<u>relations</u> before marriage? | 1 | 2 | 3 | 4 | 5 |
-
- | | <u>Always
Wrong</u> | <u>Usually
Wrong</u> | <u>Neither
Right Nor
Wrong</u> | <u>Usually
Right</u> | <u>Always
Right</u> |
|-------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------|----------------------------------------|--------------------------|-------------------------|
| 11. What is your attitude about
teenagers necking before
marriage? | 1 | 2 | 3 | 4 | 5 |
| 12. What is your attitude about
teenagers petting before
marriage? | 1 | 2 | 3 | 4 | 5 |
| 13. What is your attitude about
teenagers having full sexual
relations (sexual inter-
course) before marriage? | 1 | 2 | 3 | 4 | 5 |

Thank you for your help with this study. Please put this questionnaire in the enclosed envelope, and mail as soon as possible.

Appendix D.
Parent Survey Cover Letter

April 9, 1984

VAddressV

Dear VNameV:

We are conducting a study of adolescents and their parents that is intended to help us better understand how some teen problems might be prevented or reduced. Your son or daughter was selected as part of a cross section of high school students in California, New Mexico, and Utah who have already completed a questionnaire similar to this one. Your response as a parent is very important to insure that the results will be accurate and representative of the parents studied. Please take the time now to respond to the enclosed questionnaire.

All answers to the questions will be kept strictly confidential and will never be reported individually. Please respond to every item by circling or writing in the most accurate response. Two questionnaires are provided so both parents can respond if both are present. Please complete the questionnaire within one week and return it in the enclosed postage-paid envelope.

I would be happy to answer any questions that you might have if you would write me or call collect (801) 750-1552. Your participation is very important and greatly appreciated.

Thank you for your assistance.

Sincerely,

Brent C. Miller
Research Director

cjb

Enclosures: 2 Questionnaires
Return envelope

Appendix E.
Parent Follow-up Letter No. 1

April 30, 1984

VAddressV

Dear VNameV:

About three weeks ago I wrote to you seeking your opinions about family relationships between adolescents and adults. As of today we have not yet received your questionnaire.

This study is important because it will help us better understand parent-adolescent relationships. I am writing to you again because each questionnaire is important. You are part of a small group of selected parents who are being surveyed in California, New Mexico, and Utah.

Your response is needed in order for the results of this study to truly represent the groups parents selected.

The survey should be filled out by both parents when possible, but we would rather one parent's survey than none. In the event your questionnaire has been misplaced a replacement is enclosed.

Your cooperation is greatly appreciated.

Cordially,

Brent C. Miller
Research Director

cjb

Enclosures: 2 Questionnaires
Return envelope

Appendix F.
Parent Follow-up Letter No. 2

May 21, 1984

VAddressV

Dear VNameV:

I am writing to you about our study of adolescents and adults. We have not yet received your completed questionnaire. The large number of questionnaire is important in our survey.

Past experience suggests that those who return the questionnaire at different times tend to have somewhat different but important opinions. It is for this reason that I am sending this survey by certified mail to insure its delivery. In case our other correspondence did not reach you to complete and return it as quickly as possible.

Your contribution to the success of this study will be greatly appreciated.

Sincerely,

Brent C. Miller
Research Director

cjb

Enclosures: 2 Questionnaires
Return envelope